PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN

COORG,

FOR

1886 87,

By F. B. DICKINSON, Esq.

WITH A REVIEW BY THE CHIEF-COMMISSIONER

AND

ORDERS BY THE GOVERNMENT OF INDIA.

Bangalore
PRINTED AT THE MYSORE RESIDENCY PRESS.
1887.

Eight Annas.

X

No 1027F., dated Simla, 27th October 1887

From—SIR E. C BUCK, Secretary to the Government of India, Revenue and Agricultural Department,

To—The Chief Commissioner of Coorg.

I AM directed to acknowledge the receipt of your letter No. 1181-5196, dated the 22nd August last, forwarding the Report of Forest Administration in Coorg for the year 1886-87, with the Commissioner's remarks and your Resolution thereon. The documents, I am to observe, have been submitted with commendable punctuality.

2. From what is said in paragraph 5 of your Resolution, the Government of India gathers that all the forests now shown in Form No. 49 are Reserved Forests; but I am to ask for information regarding the "Unreserved Forests" treated of in paragraphs 67 to 70 of the Report, and to say that, if these are State Forests not yet brought under the Act, they should appear in the Form as "Unclassed State Forests."

3. I am to invite attention to the request made in paragraph 2 of the review of the Report for 1885-86, that it might be clearly stated how far it has been possible, in the Ghat forests, to restrict cultivation within the areas proposed to be reserved under the Act. This question is insufficiently dealt with by the Deputy Conservator in his present Report.

4. It is understood that preliminary working-plans exist for the Nalkeri and Hatgat forests only; and that the areas cut over in these forests gave a considerably larger yield than that calculated from the valuation surveys. I am to say that, although errors of estimation on the safe side have less objectionable features than errors which may lead to overworking, underestimates of such magnitude as have now been brought to light, in connection with the working of these two forests, must be considered as anything but satisfactory. I am to suggest that, in the conduct of future valuation surveys, more care should be taken to ascertain the average cubic contents of the trees to be removed. It is observed that the number of trees felled in the Mawkal Reserve was, owing to inattention to orders on the part of some official not named by the Deputy Conservator, allowed to exceed the provisions of the plan of operations; and neglect of orders is mentioned in another part of the Report. The Deputy Conservator of Forests has, it is presumed, ample power to deal with such cases of inattention and neglect on the part of his subordinates, and he may be called upon to exercise his authority effectively.

5. The area under protection from fire was increased by 2 square miles only, and the proportion of failures was nearly double that of 1885-86, while the cost per square mile was considerably increased. This question has your full attention, and you have impressed on the Deputy Conservator the importance of attaining success in this direction. The result of the year's operations cannot be called other than unsatisfactory; and it appears that the Coorg Forest Department has yet much to learn in the conduct of fire-conservancy operations. It is a matter of special regret that the largest fire should have occurred in the Hatgat Reserve, one of the forests for which a working-plan has recently been prepared. Your promised further report on this subject is awaited; but I am to suggest for your consideration whether, in communication with the Chief Commissioner of the Central Provinces, it would be possible to depute Mr. Dickinson, at a suitable season of the year, on a short visit to some selected locality in the Central Provinces, where he could study the system of fire-protection successfully practised there.

6. I am to notice what is said by the Deputy Conservator regarding the advantage, in the matter of illicit grazing, taken by persons residing at a distance from the forests, in consequence of the present unsettled state of the grazing rights; this question will doubtless meet with due consideration from you.

7. I am to note that the opinion of the Deputy Conservator on the subject of the progress of natural reproduction of teak is more favourable than that expressed in the Report of the previous year. It is presumed that as soon as the success of the teak plantations at Kutumpolle is assured, they will be extended as rapidly as circumstances admit, and that the experience gained in this class of work will be made use of in establishing a steady scheme of planting teak. Mr. Dickinson doubts the success of sowing the seed of this tree in places where the bamboo has died; but the unsatisfactory results he fears may be avoided, at any rate to a great extent, by sowing plenty of seed, so that the plants may come up close together. I am to suggest that the experiment of making such sowings might with advantage be tried on a sufficiently large scale to admit of a fair judgment on them being pronounced.

8. In view of the diminishing size of the sandal trees referred to in paragraph 61 of the Deputy Conservator's Report, I am to enquire whether a more rapid extension of the area of plantations of this species is not possible, and to suggest that the stock of marketable sandal trees remaining at the disposal of the Department should form the subject of an early investigation, enumeration surveys being undertaken with as little delay as possible. The cutting of undersized trees is, I am to observe, very much to be deprecated. Further attention will without doubt be paid to the cutting of forest creepers.

9. It is presumed that the record of rainfall, in different parts of the Coorg forests, was prepared from observations made by the Forest officials. The Deputy Conservator's efforts in this direction are appreciated; and I am to suggest that such observations should be made in communication with the Meteorological Reporter.

10. The Government of India would have been glad to see some explanation from the Deputy Conservator of his statement that a less ready sale is found for teak wood than for *honnè*. The prices at which sawn wood of the former kind was sold appear low as compared with those prevailing elsewhere for similar timber.

11. The number of trees removed from Unreserved Forests was small. Timber to the value of Rs. 3,828 was sold from lands given up for coffee cultivation. The amount of free grants given from Reserved and from Unreserved Forests was very moderate. The new leases for the cardamom *malés* were given out during the year, and it is expected that they will result in an enhancement of the revenue derivable from this source. It is a matter of regret that prices were so low when the crops were picked; but that they have now risen considerably is satisfactory.

12. As regards the financial results of the year's work, I am to remark that the Receipts, as compared with those of 1885-86, were increased by Rs. 9,905; but as the Charges were also larger by Rs. 8,398, the Surplus was improved by Rs. 1,507 only. Short collections of sandalwood, attributed to failure of supply, caused the revenue to turn out smaller than had been anticipated. The larger expenditure was mainly due to extended timber operations, the favourable result of which will, it is hoped, be felt during the current year. I am to suggest that the experiment may be tried of selling trees standing in the forests; this system has in some cases led to higher net prices being realised than when the trees were felled and converted departmentally.

13. The Government of India is glad to learn that, in your opinion, Mr. Dickinson is deserving of commendation for his management of the Department during the year.

No. 1028F.

COPY forwarded, for information, to the Meteorological Reporter to the Government of India, with reference to paragraph 9.

Appendix showing the discrepancies noticed in the Forms appended to the Forest Administration Report of Coorg for 1886-87.

FORM No. 49 (AREA OF FORESTS).

The equivalent of 153,019 acres on 1st April 1886 is entered as 240 square miles, instead of 239 square miles. The Form does not, as it purports to do, show the area of Protected and District Forests. All State Forests, including waste lands, should appear in the Form, the total area of each class being shown separately.

FORM No. 52 (AREA OF PLANTATIONS).

The area of Cultural Operations on 1st April 1886 is given as 10 acres, and the grand total area of Regular Plantations and Cultural Operations as 1,012 acres; whereas in last year's Report, the area on 31st March 1886 of Cultural Operations was shown as 38 acres, and the grand total as 1,040 acres.

G. C. Press, Simla.—No. 613 R. & A. D.—2-11-97—210.

Proceedings of the Chief Commissioner of Coorg, (Forests),—No. 1482—5196, *dated the* 20*th August* 1887.

READ—

Letter No. 299—177, dated the 7th July 1887, from the Commissioner of Coorg, submitting with remarks the Progress Report of Forest Administration in Coorg for the year 1886—87.

No. 1482—5196, DATED BANGALORE, 20TH AUGUST 1887.

ORDER THEREON.—In paragraph 4 of the letter forwarding the Report, the Commissioner remarks that "it may be well worth consideration if some plan cannot "be devised for the removal of all sandal trees from private holdings when good "reasons can be shown by the land-owner for this being done."

The Officiating Chief Commissioner recognises the importance of this matter, but considers that the question is one which ought to be taken up separately.

2. In paragraph 5 the Commissioner remarks that *bane* lands have been and are being so extensively cultivated with coffee, that the pressure of the people for free grazing in Government forests is increasing, and that unless their cultivation is attended by severer penalties than the imposition of an assessment of Rs. 2 per acre, which the present rules provide, such cultivation will continue to extend. It seems to the Officiating Chief Commissioner, *prima facie*, very questionable policy to prevent the cultivation of such jungle lands, unless there is a serious danger of pasture running short. In a report on the proposed formation of fuel and fodder reserves (dated 15th June 1885) the Deputy Conservator expressed an opinion (in which the Commissioner generally concurred) that the necessity for forming such reserves did not exist there being no scarcity of pasturage, but the subsequent extension of "*Bane*" cultivation may have changed this state of things, and the Officiating Chief Commissioner would therefore be glad to see the matter separately discussed.

3. With reference to the introductory paragraph of the Report, the Officiating Chief Commissioner regrets to find that serious inconvenience resulted from Mr. Mutannah's deputation to the Central Provinces. If the matter had been properly represented, the Government of India would have been moved to arrange for a substitute. Mr. Fitzpatrick desires the early submission of a report on this important subject.

4. With regard to the remark in paragraph 7, that a suitable establishment is necessary to deal effectually with encroachments, Mr. Fitzpatrick fails to understand why no application for larger extra establishment was submitted if such was considered necessary. In their letter No. 612 dated 24th July 1886 (copy of which was forwarded to the Commissioner for communication to the Deputy Conservator) the Government of India while negativing the proposal to increase the permanent forest establishment distinctly sanctioned the entertainment of temporary establishments to supplement it if such were found to be really indispensable.

5. The forests which were gazetted as "Government Forests" under the old Act (VII of 1865) were declared to be Reserved Forests under the provisions of Section 34 of Act VII of 1878. About 3 square miles were added to these forests during the year under review, and their area now comprises 142 square miles. It is observed that the areas of two of the Reserved Forests, as first recorded by the Survey Department, have been corrected during the year by that Department, the alterations involving in one case an increase of 93 acres, and in the other a decrease of 179 acres. It is very important to have the areas of these forests correctly recorded and their boundaries clearly defined in order to avoid future complications. The Officiating Chief Commissioner is, therefore, glad to observe that arrangements are being made for the erection of boundary stones along the demarcation lines, (which are said to be every where well defined) of the deciduous forests. The question of the appointment of a Forest Settlement Officer to inquire into and determine the existence, nature and extent of any rights alleged to exist in favour of any persons in these forests is still under consideration.

Proceedings of the Chief Commissioner of Coorg,
(Forests),—No. 1482—5196, *dated the* 20*th August* 1887.

6. Chapter II of the Report deals with Surveys and Working Plans; but the use of "Working Plan" and "Annual Plan of operations" as synonymous terms by the Deputy Conservator in paragraphs 9, 11, 12 of the Report is misleading. It is inferred from the 9th paragraph of the Report that preliminary working plans have been prepared for only two Reserved Forests, viz., Nalkeri and Hatgat, and therefore all, or most of the figures, in the tabular statement in paragraph 11 must refer to the annual Plan of Operations, not to Working Plans, as the headings would seem to indicate. Further, a considerable difference in the figures for the Nalkeri forest is observed in the statements given in paragraphs 11 and 12 of the Report, which the Deputy Conservator should explain.

7. In paragraph 13, the Deputy Conservator remarks that a comparison of the figures in paragraph 12 of the areas worked in the Hatgat and Nalkeri forests shows that the yield was larger than that calculated from the valuation surveys, and that this is satisfactory in a way as it shows that the yield has not been overestimated; but it seems to have been enormously underestimated and this, in Mr. Fitzpatrick's opinion, can hardly be called satisfactory.

8. The number and extent of forest fires are again an unsatisfactory feature in the Report. It is stated that the largest fire occurred in the Hatgat Reserved forest, and that it started in three different places. This looks suspicious, and the Officiating Chief Commissioner is, therefore, desirous of knowing whether any inquiry was made as to its origin. The damage done by fire is much to be regretted, especially as it in several cases seems to have been attributable to the neglect of the Forest officials. In reviewing the Report for 1885-86, the Chief Commissioner observed with regret that the result of fire protection was less successful during that year than in the two previous years, the failures having been 10 per cent of the area attempted against 9 per cent in 1884—85, and 8 per cent in 1883—84. But the failures recorded in the year under review are far more disastrous being nearly twice as extensive as in the year 1885—86. These results compare very unfavourably with those obtained in Ajmere-Merwara, where out of an area of 144 square miles attempted in 1885—86 and 1884—85, the failures were only 55 and 47 acres, respectively, or almost *nil*; or in the Central Provinces where the failures were only 5 per cent of the area attempted. The attention of the Deputy Conservator is drawn to the remarks made in the 6th paragraph of the review of the Report of 1885—86, and the Officiating Chief Commissioner would again impress on that officer the importance of this matter.

9. The Ghat forests, comprising an area of about 349 square miles, are naturally protected from fire owing to their ever green state. But the Deputy Conservator does not furnish the estimate, called for in paragraph 7 of the review of the Report of 1885—86, of the proportion of area which escapes fire in deciduous or burnable forests which are not reserved or protected from fire. Mr. Dickinson is again requested to give this information in future reports.

10. The Officiating Chief Commissioner observes that the cost of protection is very high in Coorg. It was Rs. 18 per square mile in 1884—85, Rs. 15 in 1885—86, and Rs. 15—5—0 in the year under review. In the Central Provinces the cost was a little over Rs. 12 in 1885—86, while in Ajmere-Merwara it was only Rs. 4 in each of the years 1884—85 and 1885—86. Mr. Fitzpatrick directs the attention of the Deputy Conservator to the necessity for economy in this direction so far at least as is consistent with efficient fire protection.

11. A report has just been received from the Commissioner and the Deputy Conservator on the suggestions made by the Government of India in the 5th paragraph of letter No. 176 F. dated the 8th March 1887, regarding measures to be adopted for protecting forests from fire, and will be separately considered.

12. The revenue derived from grazing was Rs. 368—4—0 against Rs. 187 (exclusive of Rs. 2,000 at annas 8 per head of 4,000 Amrat Mahal cattle for which the Deputy Conservator took paper credit) in 1885—86. In paragraph 30 it is

estimated that about 21,951 ryots' cattle graze in the Reserved Forests, but that in some cases the numbers given are far in excess of those which are actually grazed. The Rangers were ordered to prepare lists of the number of cattle actually grazing, in each forest; but the Deputy Conservator remarks that, with the usual inattention to orders, especially any new order, on the part of Coorg officials, lists were prepared for only 4 forests out of 16. Orders have again been issued on the subject, and the Officiating Chief Commissioner hopes that measures will be taken to ensure their strict enforcement in future.

13. It is satisfactory to note that the natural reproduction of teak was fairly abundant, but the increase in the cost all round of new teak plantations should have been explained. The Officiating Chief Commissioner is glad to observe that more attention is being paid to the work of cutting creepers and forest weedings, the area treated during the year under report being 820 acres as compared with 267 in the previous year.

14. Satisfactory progress is noticed under the head "artificial reproduction."

15. Considerable progress has been made in the construction of Forest roads.

16. Experiments on silos were continued; one of these was opened and contained good silage, but the people refused to take it though offered to them without payment. Mr. Fitzpatrick thinks that the mere dislike of the people to anything new would go far to account for their not using the fodder.

17. It is stated in paragraph 60 of the Report, in explanation of the small quantity of fuel supplied to the Distillery, that the contractors made arrangements with private persons for a supply at cheaper rates. This seems strange and should be inquired into.

18. In paragraph 61 it is stated that 4,320 sandalwood trees were cut, producing 78½ tons, or an average of 55 trees to the ton, the average for the previous three years being only 30 trees to the ton. This seems to indicate that the larger trees are getting exhausted. The Officiating Chief Commissioner trusts that immature trees are not being felled. This question should be fully discussed by the Deputy Conservator in the next report.

19. Although the revenue, Rs. 99,291, was less than the estimate by Rs. 11,709, the surplus amounted to Rs. 25,203 or Rs. 1,507 more than that of the year 1885—86; but the expenditure, Rs. 74,088, exceeded the charges of the preceding year by Rs. 8,398, which is partly attributable to a large increase in timber operations. The chief item of decrease in the estimated revenue was under the head of sandalwood, owing to short collection, it having been found that the supply of mature wood was running short, as noticed in the preceding paragraph.

On the whole, the Report exhibits satisfactory progress except in the matter of fire protection, and the thanks of the Officiating Chief Commissioner are due to Mr. Dickinson for his efficient management of the Department.

L. WHITE KING.

Secretary.

No. 299—177.

COORG COMMISSIONER'S OFFICE.

Dated 7th July 1887.

FROM

THE COMMISSIONER OF COORG.

To

THE SECRETARY TO THE CHIEF COMMISSIONER OF COORG,

BANGALORE.

SIR,

I have the honor to forward for submission to the Chief Commissioner, the Annual Progress Report of the Forest Administration in Coorg for 1886—87, which was received from the Deputy Conservator of Forests under cover of his No. 396—222 of 25th ultimo.

2. The report is occupied mainly in departmental matters which do not concern the Revenue administration, with which much of the working of the Department is intimately associated. There are but few points therefore on which any remarks of mine would be pertinent.

3. The injury caused by Forest fires which have been numerous and have affected, as the report shows, nearly every forest in the province, in spite of the care and exertions of the Deputy Conservator are much to be deplored. The force with which the east winds blow in these parts in the early months of the year is a familiar fact, and affords a special element of difficulty in forest protection.

4. In para 16 the Deputy Conservator refers to the measures taken for recovery of compensation from ryots and others who damage sandal trees. The damage is usually done unwittingly while burning a jungle to make a clearing, or otherwise, for sandal trees are found growing singly everywhere, and it must be difficult often to avoid causing some injury in this way. It is rarely that a man who has thus accidentally committed damage spontaneously reports the circumstance. He prefers to risk the chance of detection, for the disclosure would probably expose him to much inconvenience. It is the business of the minor Forest officials to detect these cases, and when this occurs, application is made to the Commissioner to recover the amount of damage, as assessed by the Forest Department, by summary process. It is inevitable perhaps that the power thus given to petty officials should give rise to abuses, and that thus the existence of sandal trees in a man's holding is a possible source of annoyance and trouble to him. Sandal is a Government monopoly, and a land-owner cannot acquire a sandal tree standing in his lands by purchase. If its removal is necessary, this must be done by the Forest Department. It may be well worth consideration if some plan cannot be devised for the removal of all sandal trees from private holdings when good reasons can be shown by the land-owner for this being done.

5. In para 32, the Deputy Conservator points very truly to the fact that the ryot's *banes* have been and are being extensively cultivated with coffee, and that consequently the pressure of the claims of the people for free grazing in the Government Forests is increasing. The object of the grant of *banes* has been perverted by their conversion into coffee estates and efforts were for long made to prevent this, but, in the absence of any law, naturally without success. It has been necessary at last to recognize existing facts and the coffee cultivated *banes* have been recently assessed, at full coffee rates, excepting 10 acres allowed free. Under the rules the cultivation of *banes* in future is prohibited, but unless the cultivation is attended by severer

penalties than the imposition of an assessment of Rs. 2 an acre, this rule will, it is certain, be equally disregarded, wherever the land is suited to this kind of cultivation, and while there are persons, European Planters or Natives, prepared to purchase. In the forthcoming settlement of grazing rights in the Forest Reserves, it will be requisite to investigate the claims very narrowly and to exclude those of ryots who have cultivated or alienated their *banes*.

6. The people have, it is evident, not taken to silos. By publishing the results of experiments among the European planters and native land-holders, it was hoped that the system would be gradually introduced, but it has apparently made no progress. I am unable to account for this, unless it be the prevalent idea that cattle suffer from the silage.

7. The results of the leases of the cardamom *malles* were reported in my letter No. 634—358 of 3rd November last. The number of *malles* leased was 193, as compared with 164 previously, and the financial result will be that the *malles* will yield—

for the 1st period of 7 years	.. ..	*23,673—2—2,
for the 2nd do of 7 years	.. ..	28,041—2—2; and
for the 3rd do of 7 years	.. ..	31,827—2—2.

The amount realized from this source for the term of the former leases was Rs. 21,260 annually. An additional number of *malles* will shortly be leased on tenders as before.

I have the honor to be,

Sir,

Your most obedient servant.

TREDWAY G. CLARKE,

Commissioner.

*The figures given in para 71 of the Deputy Conservator's report are incorrect.

PROGRESS REPORT

OF THE

FOREST ADMINISTRATION IN COORG,

FOR

1886–87.

INTRODUCTION.

The Coorg Forest Division was under the charge of Mr. F. B. Dickinson during the year. Mr. Muttannah, Sub-Assistant Conservator, obtained officiating promotion to the grade of Assistant Conservator. He was transferred to the Central Provinces in October 1886, but it was not found possible to send any officer to Coorg in his stead. This has caused the stoppage for the present of operations preparatory to making out working plans, there being as much work as can be well done by one officer in the ordinary work of the Division, especially as the Forest Department has now a more intimate connection with the Ghaut Forests, and the management of the *males* therein situated.

2. The Indian Act VII of 1878 was ordered to be made applicable to Coorg at the end of the year and rules under this Act are in course of preparation.

CHAPTER I.

AREAS AND BOUNDARIES.

3. An addition of about 800 acres was made on the west of the southern portion of the Anecadu Forest, which is useful as a source for the supply of firewood and timber to the town of Mercara.

Another addition of about 1,000 acres called the Chik Hudugur Forest was made on the south west of the Gadinad Forest, to which it is a valuable addition containing some good timber of *honne, matti, bite,* and other kinds.

4. Two corrections of areas have been made, being differences between the areas reported by the Survey office, and the final areas entered by that office on the maps. One makes the Mawkal Forest 93 acres more and the other makes the Arikeri Forest 179 acres less or a total decrease of 86 acres. The area of the Reserved Forests is now 1,54,733 acres or 142 square miles.

5. The demarcation lines of the deciduous Forests were all cleared of undergrowth and are everywhere well defined. Four hundred slabs 5′×1¼′×6″ were cut, engraved with the letters C. F. D. and numbered. Arrangements are being made for their erection which has been delayed owing to the difficulty in getting carts to carry them from the quarries.

6. Parts of the demarcation line of the Ghaut Forest were cleared where it was necessary to examine it with the Survey plans to attest their correctness, also some portions were altered to exclude small pieces of land for Kumri cultivation in the below-Ghaut villages bordering South Canara and a few pieces taken up for cultivation previous to the demarcation.

7. It has recently been decided that the Ghaut Forests are to be Protected Forests under Act VII of 1878. This will enable the Forest Department to deal effectually with encroachments, at least if it gets a suitable establishment for looking after them. At present there is only one temporary Forester and two Guards for this large area.

CHAPTER II.

Surveys and Working Plans.

8. *Surveys.*—The re-survey of corrections of the Ghaut Forest demarcation line was undertaken by Mr. Morrell in the end of December and is approaching completion. Portions of the fuel plantations and Reserves near Mercara were surveyed by a native Surveyor while awaiting the formation of Mr. Morrell's party to proceed to the Ghauts, but unfortunately most of his work has been returned for correction.

9. *Working Plans.*—Preliminary Working Plans were made out for the Nalkeri and Hatgat Forests which have an area of 53,662·00 acres and whose estimated annual yield is as follows :—

Teak	..	..	61,000	Cubic feet
Honne	..	..	21,000	"
Matti	..	..	50,000	"
Bite	..	..	21,000	"
			1,53,000	

besides 3,490 *matti* poles. It will be of interest to note that when the valuation Surveys were commenced, *Nandi* (*Lagerstroemia micro carpa*) was so little asked for by purchasers, either in depot or in the forest, that it was not thought worth while to encumber the enumerations with it, but since that a considerable demand for it has sprung up for mining operations; and it is necessary to take it into account. The yield would probably be between 5,000 and 10,000 cubic feet per annum for the two forests. Until more is known, the lower estimate will be used.

10. It will be seen further on (para 11) that the estimate of annual yield appears to be below the mark, which is due principally to trees giving a larger average outturn. We shall be able to say more on this point next year. But so far the results justify the Working Plan, which appears to rest on a firm basis.

11. The annual plan of operations was made out showing the quantity of timber to be felled in each forest. It is given briefly below leaving out details which are only of interest to the executive officers. Opposite the forecast is given the actual work done.

Name of Forest.	Provisions of Working Plan.		Result of Operations.		Remarks.
	No. of Trees.	Cubic feet.	No. of Trees.	Cubic feet.	
Bactancote	36	1,200	72	2,001	Sudden demand for timber at Mercara, 27·79 Cubic feet per tree.
Anekadu	60	2,000	50	2,626	52·52 Do
Attoor	30	1,000	176	7,652	Old trees on village land not included in forecast. 43·48 Cubic feet per tree.
Yedavanad	250	8,000	138	7,800	56·52 " "
Malambi	50	1,600			
Nidta	50	1,600	167	2,859	17· " "
Jaincal	50	1,600			
Dubare Chilpe	130	4,000	90	2,330	25·78 " "
Do Ammale ...	50	1,400			
Maldare	120	3,600	148	4,772	32·25 " "
Mawkal	60	2,000	175	5,752	32·86 " "
Arkeri	60	2,500	93	3,556	37·16 " "
Hatgat West Irmani ...	300	12,500	465	27,297	58·72 " "
Do East Kallallah ...	150	7,000			
Nalkeri Dodahallah ...	800	30,000	711	44,466	62·54
Do do ...	...	...	9	1,750	sawn timber 194—44 } 64·18 do

The annual Plan likewise laid down the work on roads, buildings, plantations &c., and the amount of money to be spent on each.

From this it will be seen that in Nalkeri and Hatgat forests more timber was cut than allowed for. This was in accordance with subsequent orders given after the Preliminary Working Plan for these two forests had been finished and when the contract for carting timber had been taken up by a European, who gave promise of working it energetically. It was thought that these orders were justified, at the expense of slightly dislocating the allotments for expenditure under different heads, by the great advantage gained in expanding timber operations and increasing the revenue under that head.

It will be noticed that the number of trees has not been much exceeded, but that they have yielded a good deal more than was anticipated. It will be interesting to note the average cubical contents of a tree in each forest. It is only in Mawkal and Attoor that the number of trees as per forecast has been much exceeded. In Mawkal the cause was inattention to orders, and in Attoor some ancient teak trees were cut in village forest; these go to swell the list although they did not actually come from the Attoor forest. The increase in Bactancotè was due to orders, a demand for *nandi* having sprung up suddenly in Mercara and no timber of that class being ready in the forest, it had to be cut.

12. The following figures show the quantity of timber cut in Nalkeri and Hatgat and the areas cut over, compared with the figures of the Working Plan.

	Nalkeri.		Hatgat.		
	Working Plan	Actuals.	Working Plan.	Actuals.	
Area	1,385	570	850	260	
Cubic feet	69,000	50,391	59,000	27,297	

But of this a large stock has been left in the forest and will be brought out in 1887—88. The quantity left in the two forests is:—

In Nalkeri	31,556	Cubic feet.
„ Hatgat	10,194	„
Total....	41,750	

13. From this comparison, it will be seen that the areas cut over gave a larger yield than that calculated from the valuation surveys. This is satisfactory in a way as it shows that the yield has not been over estimated. The result is due to trees giving a larger outturn than was estimated.

CHAPTER III.

(1). *Establishments.*

14. Mr. Muttanna, the Sub-Assistant Conservator, was transferred to the Central Provinces in October and has not as yet been replaced. Mr. Tipping, the Superintendent of the Kutumpolle plantations, applied to be taken into the Department as a Sub-Assistant Conservator and arrangements have been made for his examination. One Ranger retired and was replaced by a man from the Forest School.

15. There were no other important alterations. The proposals for increasing the Forest and Office establishments were not sanctioned, but temporary employés were sanctioned for various posts which have been formed of recent years.

(2). *General Protection and Breaches of Forest Law.*

16. The number of prosecutions was 10 and convictions 7. There were no serious cases during the year. Several cases of damage done to sandal trees were brought to light, but as a rule there was no evidence of intentional damage. In the majority of such cases the Commissioner recovered compensation from the persons who caused the damage.

Compensation for illicit grazing was recovered in some instances.

(3). *Forest Fires.*

17. Fires were again bad this year. The largest took place between the 15th and 26th February. An abnormally strong East wind began on the 13th February and blew *continuously night and day* until the 24th. When this wind began, the burning of the Eastern boundary lines had not been quite finished and in some cases the fire came across the unfinished line. In other cases the Foresters attempted to finish burning their lines, almost an impossibility in such a wind. It will thus be seen that whatever was done disaster was almost certain under the circumstances. Had the Eastern lines been well burnt previously the forests would have been comparatively safe, but this could not well have been done, for until the wind commenced the lines were for the most part too green to burn well. Two or three days of the high dry wind totally changed the jungle and made it readily burnable. The worst feature of the fires, which occurred during this time, was that they could not be stopped even at night as is generally quite practicable. Although large gangs of men were collected still the fires continued to rage. It was only by burning back from a cleared line that eventually they were arrested. Even this was not always successful as the line could not always be cleared quickly enough.

18. The largest fire that occurred at this time was in Hatgat, always a bad forest for fires. The Forester had burnt his Eastern line well, and the fire started within the forest from what cause, it is impossible to say. The Forester asserts that it started in three different places. This fire burnt for three days, and went right across the northern part of the forest. The Ranger was present part of the time and states that every effort was made to extinguish it. In North Arikery, Mawkal and Dubare there were fires at the same time, and in South Arikery a few days later. The fire in Mawkal was caused by fire being let out of the fire line between that forest and Devamarchi. In North Arikery, fire is said to have come from a burning tree in the middle of the fire line. In South Arikery, fire came over the Eastern boundary (which had been once burnt) at night. The Forester in charge might have stopped it had he been ready with coolies on the spot when the fire reached the line. In Nalkeri, there was a fire that burnt about 2,000 acres on the 27th, i. e. after the wind had lulled. The secondary line a mile in from the boundary, had not been burnt, although orders had been given to burn it before the 10th. The Forester was therefore fined.

19. In March there were small fires, one in Nalkeri starting in the middle of the forest, two in South Arikery, and one in Dubare, all supposed to have been put in by Thikarries. There was also a small fire on the roadside in Hatgat probably caused by bandy men leaving their cooking fire unquenched. A small fire from the same cause took place in Mawkal. In this case the bandy man was caught and prosecuted, but there was not sufficient evidence to convict him. He however lost his blanket and other kit which was burnt.

20. There were also four fires in teak plantations, and one in the sandal plantation, 15 acres at Karmad. This has caused serious loss, as although most of the plants have thrown up shoots from the roots, such shoots grow as slowly as the original plant and thus 5 years growth is lost, and besides weeding work must be begun *de novo*, whereas the plants had attained height enough, before the fire, to only require one weeding a year. The fire occurred whilst the line was being burnt and was due to the carelessness of the Forester and Guards. The time chosen for the burning being the 15th February i. e. when the abnormally high wind above mentioned was raging, a most unfortunate time to choose. There was no reason why it should not have been burnt before the 10th. Orders had been given to scrape a line round the sandal plantation which were neglected. The Forester was ill at the time (died shortly afterwards) and the work was being looked after by a substitute, who was wanting in experience. The fire from the sandal plantation communicated with the teak plantation adjoining and burnt about 40 acres, but did very little damage, as it got in in the evening and was not fierce, the plants were moreover for the most part high enough to escape damage from a light fire.

21. The 2nd teak plantation burnt was at Tittimatty. A line was cleared and burnt round it, but on one side it adjoins an abandoned coffee estate and lantana

has spread up to the edge. The abandoned estate was burning and the fire rushed across from the lantana into the teak plantation. The whole of the bit (20. acres) was burnt in a short time. It was all, but about an acre, 2 years old and the plants small. The shoots from the roots have already nearly reached the height the plants were before the fire, and the weed which was before very thick has been well cleared by the fire, so that this fire has really done more good than harm.

22. The 3rd fire occurred at Kutumpollay whilst burning the new clearing. A belt of evergreen forest 100 yards broad had been left between the plantation and the new clearing, but a burning stick of some sort must have been blown right over this belt and alighted some 200 or 300 yards further on in the plantation and set it on fire, once on fire, the rotten logs in the plantations blazed fiercely, and although Mr. Tipping cleared several lines to stop it, it always burst through them. Altogether about 150 acres were burnt. In some part considerable damage was done as much as 2 to 3 per cent of the plants being burnt out, but in others the fire passed through hardly scorching the bark. The shoots in places badly burnt are coming up vigorously so that not much time will be lost.

23. The 4th teak plantation burnt over was that in Anecadu 40 acres. It is said to have got alight from a spark blown from a dry tree burning in the fire lines. The line ought to have been burnt much earlier, and the Forester was fined for putting it off till the grass was so inflammable as to be dangerous.

24. A list of fires with their causes is herewith appended.

No.	Name of Forest.	Acres.	Remarks.
1	Hatgat Forest Murkal ...	15,125	The Forester reports that on the 15th February fire broke out on the northern side of Murkal forest, and a great portion got burnt and that he collected plenty of coolies and put it out.
2	Karmad ...	45	The Forester reports that fire broke out on the 18th February 1887 at about 1 o'clock in 1882's bit of the plantation and burnt 1875 and 71's bits. 1870 and 72's bits got half burnt. This fire came in from Dalambi gadde and was caused by some unknown person.
3	North of Kalhalla ... Nowloogadde ...	895 182	The Forester reports that a fire broke out on the 15th February 1887 at Aaccutte close to the Eastern line and that before putting out this, fire crept from the west and another broke out at Chunchloogadde; by the time he put this out, fires broke out at Munde Boyee Betta, Kolangeri Tittoo, Devere gadde Hadlu and was so very severe he was unable to put them out. Reports also that the timber carting cartmen had left their camp without putting out the fire they had kindled. The fire was blown up by the wind and burnt about 10 acres and a log as well. Reports further that on information received through cartmen the Ranger and Forester proceeded and found that 8 or 10 acres of land had been burnt on the eastern side of Kalhallah Bandy road and about 30 acres on the southern side of Irumani Coupe Bandy road, and that this fire was caused by some unknown people. Reports that on the 8th March 11 acres got burnt at Kalhallah, and 39 acres at Kiggare, and by this fire two hollow teak logs got burnt.
5	Nalkeri Forest, east of Dodallah ...	2682	Reports that somebody had set fire at the Sarathi on the foot-path, and that this fire burnt from the Hatgat boundary crossing the middle line to Yerepole, forth to south 3 miles, east to west 1½ miles, and that this fire must have come in from Mysore.

No.	Name of Forest.	Acres.	Remarks.
			Reports that somebody had set fire and burnt about 10 acres at the junction of Karmad-Hunsoor road, that the Forester had put it out before it spread and got into the grass jungle.
6	Nalkeri Poojekalloo ..	185	Reports that somebody had set fire on the southern side of Nagerahole at Poojekalloo and burnt about 200 acres, but this fire did not get into the Mysore jungle.
			The Ranger reports that on seeing the place burnt in Nalkeri Forest Dodallah, Ramanjee Cattay and Mavanhallah it appears that a greater portion got burnt by wind and that this fire was put in by somebody.
7	South Dubbare ...	61	Reports that fires broke out on the 19th February 1887 in the jungle on the other side of Beemanare kallu, owing to wind his attempt to put it out was impossible; on the 22nd he quenched the fires entirely, about 1,000 acres got burnt. That this fire came in across the Beemanare colli pari while burning the Tittimatty Vanikekandi line.
8	Devamarchi Dodda Danavina roppa (cattle encamping ground) ..	11	
9	Kallupari manti ...	1641	
10	Abboor betta ...	33	
11	Do below ...	112	
12	Balapanakere ...	22	
13	Mawkal Forest Mavatoor Coupe ...	53	Reports that on the 21st March 1887 somebody had set fire to the Mavatoor Coupe, this the Forester had put out.
14	Abboor betta ...	9	
15	Balumani ...	11	Reports that Mawkal forest burnt a second time to an extent of about 100 acres; this is owing to the temporary Guards and the permanent Guard not having watched the first fire properly.
16	Majjigehallah ...	22	
17	Teak plantation ...	24	
			Reports that Bandymen Abdul, Jamal and others, who had come to cart logs from Tittimatti jungle, had camped at Balumani Tittu and had burnt 5 acres of jungle by not putting out the fire they had kindled.
18	Arikeri Forest at Anechowkoor kere ...	1808	Reports that fire broke out on the 18th March 1887 below Anechowkoor Kere and that the Forester and his Guards tried their best to put it out, but were unable to do so. On the 19th coolies were obtained, the fire put out, about one half of the forest was burnt.
19	Do Janana Catte ...	2	
20	Do Bettathoor ...	26	
21	Do at Laxmantirtha river ...	2673	
22	Dubare Forest ...	221	Reports that on the 20th February 1887 sparks flew from the Mysore forest which was burning and burnt a portion of this jungle. The fire caused no injury to the trees but only burnt the grass.
23	Anecadu Forest South ...	105	The Ranger reports that he received information that this fire broke out on the 1st March 1887, and it is impossible to say from which side.
24	Do do ...	8	
25	Do old teak plantation..	40	Reports that this fire broke out on the 10th March 1887 when quenching the fire on the stumps on the fire line. Sparks flew out from a hollow tree by the strong wind that blew at the time.
26	Do Kalloor manti ..	150	Reports that on the 23rd March 1887, the Ranger personally proceeded and put out the fire and states that this fire was caused by some Kurubars who had come there for shooting, as a fire brand was found, at the foot of the hill from which the fire arose; and states that he has written to the Sunticoppal Parpattigar to find these men out.
27	Hirikere ...	2	Reports that this fire arose on the 29th January 1887 at about 11 o'clock, and that it broke out from a fire made by some cartmen that were carting timber to Arkalagode Depot, as the cartmen left their camp without putting out the fire.

No.	Name of Forest.	Acres.	Remarks.
28	Yelsavirashime Gunagur Forests ...	10	Reports that on the 14th February 1887, this fire broke out. The Ranger personally attended and put it out and suspects that some of the village people must have lighted it. States that this fire did no injury to the trees but only burnt the withered leaves.
29	Gangawara, Mensa forest..	1	Reports that on the 14th March 1887, somebody set fire to the Ookadoo Manti on the northern side of the new clearing and that this fire was put out at once.
30	Gangwara No. 5 of 1883's Sandal plantation ...	½	Reports that this fire occurred from sparks flying out of a bamboo clump when burning the lit newly cleared for this year's plantation.
31	Fraserpett Holegerre ...	1	Reports that sparks flew from the Mysore forest on the other side of the river and caught a dried hollow tree, this side of the river, and caused this fire. The Sandalkoti Darogah and Mutsaddy attended and put it out.
			NOTE.—The distance across is reported to be 230 feet or 76 yards. This shows what a distance fire may be carried in a high wind.

Of 128,848 acres attempted to protect, 103,994 acres were protected or 80·72 per cent. This compares with former years as follows :—

	1876—77.			1877—78.			1878—79.			1879—80.		
	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.
	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.
Aukadu	...	6,377	678	11,508	9,388	1,203	11,508	10,980	451	11,507	11,508	336
Dubare	...	...	...	9,798	6,718	787	11,363	10,916	485	11,364	9,773	299
Devamachi	...	...	...	...	...	7	11,286	11,169	511	7,569	6,449	784
Karnad Teak Plantation ...	...	...	...	...	189	72	229	229	87	...	...	.
Yedavanad	...	...	...	...	...	2	7,284	6,244	506	7,838	4,937	300
Gunagur	...	...	...	...	...	...	10,188	10,184	318	5,989	5,828	106
Nalkeri	...	...	...	...	...	...	75,000	73,673	463	25,742	23,290	823
Mawkal	...	...	...	...	...	...	8,188	5,458	408	8,188	8,188	513
Gangwara Sandal Reserve ...	...	...	...	...	40	19	25	25	...	25	25	3
Aikeri	...	...	...	...	...	...	2,990	...	165	...	...	.
Hatgatnad	...	...	...	...	...	...	...	...	...	44,627	32,869	1,339
Kootompole Teak Plantation..	...	...	...	...	...	...	...	...	...	...	...	.
Fraserpet Sandal do ...	...	...	...	...	...	...	...	...	...	...	...	.
Mercara Fuel Reserve ...	...	...	...	...	...	...	...	...	...	...	...	.
Tittimatti	...	...	...	...	...	...	...	...	...	...	...	.
Dactankote	...	...	...	...	...	...	...	...	...	...	...	.
Total		6,377	678	21,306	16,315	2,090	1,33,061	1,29,478	3,434	1,22,849	1,02,865	4,503

	1880—81.			1881—82.			1882—83.			1883—84.		
	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.
	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.
Anekadu	11,507	11,307	152	11,507	10,674	127	11,507	11,500	115	11,500	11,402	290
Dubare	11,365	9,318	438	11,365	4,874	64	11,365	11,362	168	11,362	7,777	190
Devamachi	7,569	6,906	164	7,569	3,310	157	7,569	7,569	285	7,569	7,133	181
Karnad Teak Plantation ...	229	229	18	...	...	...	229	229	103	...	...	...
Yedavanad	7,839	7,839	182	7,839	7,656	178	7,839	7,833	143	7,833	7,806	189
Ganagur	5,989	5,989	95	5,989	5,678	129	5,989	5,989	104	5,989	5,768	74
Nalkeri	25,742	22,108	590	25,742	5,556	188	25,742	25,742	733	25,742	25,316	417
Mawkal	8,188	6,970	464	8,188	5,918	155	8,188	8,188	199	8,188	7,709	225
Gangwara Sandal Reserve ...	50	50	5	50	50	45	69	69	40	70	70	78
Arkeri	17,280	14,364	88	17,280	604	78	17,280	17,280	153	17,280	15,474	130
Hatgatnad	27,520	21,486	731	27,520	2,236	194	27,520	27,520	374	27,520	24,971	256
Kootompole Teak Plantation	...	...	...	...	...	83	...	...	...	134	134	...
Fraserpet Sandal ...	...	...	...	...	...	19	18	18	24	20	20	19
Mercara Fuel Reserve ...	...	...	...	...	...	...	...	...	...	85	85	21
Tittimatti	...	...	...	...	...	...	...	...	...	...	...	9
Bactankote	...	...	...	...	...	...	...	...	...	...	...	...
Total.....	1,23,278	1,06,768	2,927	1,23,049	46,556	1,417	1,28,815	1,23,299	2,446	1,23,292	1,13,665	2,029

	1884—85.			1885—86.			1886—87.		
	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.	Attempted to protect.	Actually protected.	Cost.
	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.	Acres.	Acres.	Rs.
Anekadu	11,507	11,490	383	12,557	12,154	194	11,957	11,654	195
Dubare	11,365	11,325	380	11,363	11,340	191	11,363	11,142	251
Devamachi...	9,384	9,384	214	9,384	9,326	272	9,384	7,504	285
Karnad Teak Plantation	...	...	...	...	...	...	...	...	...
Yedavanad	6,887	6,887	184	6,902	6,302	251	7,902	7,900	331
Ganagur	6,989	6,829	98	6,231	6,219	192	6,231	6,221	239
Nalkeri	25,742	18,582	703	26,142	23,860	516	26,142	23,275	539
Mawkal	8,188	7,565	292	8,188	8,188	104	8,281	8,186	247
Gangwara Sandal Reserve	85	85	47	276	278	60	276	274	84
Arkeri	17,280	14,990	170	18,476	15,618	207	18,297	13,788	188
Hatgatnad	27,520	26,004	571	27,520	20,998	262	27,520	12,730	290
Kootompole Teak Plantation	231	231	2	261	261	5	343	193	53
Fraserpet Sandal do	28	28	18	28	28	24	28	27	25
Mercara Fuel Reserve	85	85	148	200	200	175	300	300	302
Tittimatti	...	...	10	24	24	233	24	...	19
Bactankote...	...	...	...	...	...	...	800	800	21
Total	1,24,291	1,12,485	3,170	1,27,552	1,14,794	2,686	1,28,848	1,08,994	3,069

25. The cost of protection was Rs. 3,069 or Rs. 15—5—0 per square mile or 4·61 pies per acre as against Rs. 2,686 last year. The increase this year is due partly to keeping up the patrols to a later date than usual at the end of the previous season, partly to labour employed in extinguishing fires, and partly to increased protection of fuel reserves near Mercara.

26. As stated in para 24 of last year's Report, the Ghaut Forests protect themselves. It is not as yet possible to take any measures for the protection of sholahs. Something may be done by burning round them before the grass close to them is dry enough to burn, but this cannot be done without some establishment. The small temporary establishment available was employed in clearing lines to be surveyed, and will be employed next season in examining cardamom *males*, especially the *janma males*.

(4). *Grazing and Fencing.*

27. The Yelusavirashime and part of Dubare Forests were leased for grazing.

28. The revenue obtained from grazing was as follows:—

Name of Forest.	Amount.		
Yelusavirashime	35	0	0
Anekadu Bakka	6	8	0
Yedavanad	25	0	0
Abboor Hadlu	20	0	0
Sale of grass in Hurlical, Gandadagundi, and Holegre	128	12	0
Fines recovered on account of cattle impounded	153	0	0
Total Rs.....	368	4	0

29. The number of Amrut Mahal and Public cattle that were grazed for periods of from one to two months was about 2,500.

The question of payment of rent for these cattle is still pending.

30. The number of ryot's cattle which are supposed to graze in the reserves are given below:—

Name of Forest.	No. of Cattle.	Remarks.
Dubare forest	2,950	Ryots' cattle.
Devamarchi	476	do
Mawkal	875	do
Arkere forest	874	do
Hatgatnad	...	
Nalkerri	...	
Anekadu	2,012	do
Attoor	2,184	do
Malambi	1,300	do
Aluru	200	do
Sandal Koti	235	do
Kattepura	768	do
Yedavanad	1,560	do.
Jainkal betta	1,250	
Nidta	4,704	do
Gadinad	2,548	do
Total.....	21,951	

31. In some cases these numbers are far in excess of those which actually graze. The Rangers were ordered to make lists of the cattle actually gazing in each forest, but with the usual inattention to orders, especially any new order, on the part of Coorg officials.

Only lists for Nalkerri, Hatgat, Mawkal, and Arikerry were sent in and the results are shown below :—

In Nalkerri	...	...	...	195	Cattle
„ Hatgat	...	...	...	944	„
„ Mawkal	...	...	...	396	„
„ Arikerry	...	...	...	262	„
				1,797	

Orders have now been given that a register shall be kept by each Forester, in which the number of cattle belonging to each holder grazing in the Reserves shall be entered.

32. It was noticed that in some of the forests, notably Devamarchi and Mawkal, grazing had much increased during last monsoon, and the reason of this is that persons at a distance are taking advantage of the unsettled state of grazing rights to send cattle to their friends adjoining the forest to herd and graze in the reserves. Measures were taken to prevent this perversion of the privilege, and the people were warned that if the forest became overgrazed, it would be necessary to recommend the closing of such portions altogether for a term of years.

The fact of so much *bane* land having been felled and converted into coffee estates, and the greater facility of moving cattle from place to place owing to the opening up of cart roads in all directions, is without any doubt bringing more cattle to the forests than used to be brought in old times, and in the present unsettled state of the rights it is difficult for the Forest Department to deal with the question.

33. A block of about 1,000 acres in Anecadu which was excessively grazed over, and a bit of 200 acres on which some old teak trees had been felled for timber, the coppice shoots from which had no chance of contending with the excessive grazing, were closed to grazing by order of the Local Government with good results.

The neighbouring ryots have recently petitioned to have the block in the Anecadu re-opened, but it will be necessary to keep it closed for some years longer.

(5). *Natural Reproduction.*

34. The teak seeding was fairly abundant, and where there is sufficient light reproduction was pretty good. Where forest weedings have taken place reproduction of all the good species has improved, though at the same time *Grewias* and other white woods have likewise multiplied.

35. Patches of lands where *Dendro Calamus* has died out have been burnt over and will be sown with teak during the rains. In last year's Report, it was stated that this work would be carried out "in the current year"; this was an error. It was meant that it would be done in 1887. An interesting case of reproduction of sandal in the jungle adjoining the Hirrikerre sandal plantations came to notice. All the jungle surrounding this plantation is becoming more or less populated with sandal, especially the sides of a large hill about half a mile off.

These plants probably come up from seed carried from the plantation by birds, taken either from the sown lines or from old trees standing in the plantation, of which there are a good number. The portion where most of the plants are, is in village forest, or it would be worth while to enclose it and make a sandal reserve of it; being near the villages however it would not be advisable to interfere with the ryots who already look with jealousy on the plantation. The plants however will be watched and any little help by cutting, creepers and protection from fire &c., that may be practicable will be given.

(6). *Artificial Reproduction.*

36. The areas newly planted were as follows:—

Teak .	..	..	..	..	91 acres.
Sandal	..	..	..	..	25 „
Fuel ..	..	..	..	..	20 „

The total area now planted is 1,138 acres comprising 693 acres teak, 340 sandal, 105 fuel.

37 *Teak* —At Kutumpolle 80 acres were planted up, 30 of which was old land and 50 newly cleared A new bit of 75 acres has been cleared for planting in the coming monsoon The plants in the old clearings, those of 1882, 1883 and 1884 are gradually closing over head, so that these clearings will in future not cost much for weeding Even those portions that were burnt are coppicing so vigorously that they will soon catch up the other portions

The 1882 bit will require thinning in another 2 or 3 years, and the thinnings will probably bring in Rs 20 per acre, the expenditure on them is not more than Rupees 3 per acre and will gradually lessen Thinnings in 1883 and 1884 will have to follow on It will thus be seen that the plantations are likely to prove a success These details are given to give an idea of the state of the plantation as no measurements have been taken during the year

Caterpillars which retarded the growth and spoilt the tops of the plants so much 2 or 3 years ago, have now almost disappeared, and what remain do but little damage

The cost of work at Kutumpolle was about Rs 34—8—0 for new work and Rs 4—14—0 for old work, including the experimental planting of a bit of abandoned coffee land at Wattecolly half way up the Ghaut This was a failure partly it is thought owing to the heavy rain

The cost on old work is somewhat high, but it includes a considerable moiety of the Superintendent's salary and compares favourably with the cost of work done by native Foresters and is much more successful It is also more than usual, because the partial failure of the 1885 clearing necessitated the supplying up of that bit, and an extra nursery had to be made for it The cost on old work will get less and less as the area increases and the plants fill up and cover the ground

38 The only other areas planted with teak were open patches in Anecadu, Attoor and Dubbare, in all 9 acres The cost of teak plantations all round was for—

New work Rs 35—13—0 per acre | Old work Rs 4—8—0 per acre,

as compared with Rupees 27 and 5 per acre respectively last year

39 The cost of teak plantations up to date has been Rs 69,361 or Rs 100 per acre In Karmad plantation a thinning was begun in an area of about 20 acres, but had not been completed by the end of the year

40 With reference to the remarks made by the Government of India on last year's Report in regard to the high cost of teak plantations, it may be noted that had the old plantations been planted with the experience now gained, not only would these plantations have been much less costly, but they would have been repaying some part of their cost in thinnings It should however be pointed out that we should lose the benefit of the experience gained by not following out a steady plantation scheme, and it may be confidently expected that the cost per acre will gradually become much less in spite of the incubus of the old debt, and when thinnings begin regularly, the old debt will by degrees disappear

The system of sowing up large areas of land where bamboo has died, at cheap rates, is most commendable, but it may be doubted whether subsequent weedings of such large areas can be carried out, and thus although these large areas are in a way stocked with plants, numbers of them must inevitably be stifled with weed of all kinds, and the ultimate result will be a certain number of badly grown trees per acre, very different to the full crop of straight trees in a regular plantation as seen at Nelambur

Sandal Plantations.

41. The clearings mentioned in para 41 of last year were planted up and are doing well except the little bit at Maldare which was not weeded early enough.

It is only the more successful plantations such as Gangwara, Kargode, and Hirikere in North Coorg, and Tittimatty in South which are now enlarged, the others being only weeded and kept up. The above named plantations are doing well. Small clearings have been made at each for planting in the coming monsoon, in all about 35 acres.

The large ditches were made round one plantation and are effective in keeping out some of the deer.

In other two plantations they were made round two sides as there was not sufficient money to complete them, so they were not of much use. They will be finished this year.

The burning of the sandal plantation at Karmad 15 acres, is much to be deplored. A recent inspection shows most of the plants to be sprouting, the shoots will have to be kept free of weeds and their growth encouraged.

Fuel Plantation at Mercara.

42. In a bit of 20 acres covered with lantana, lines were cut 3′ wide in the lantana at 10′ apart, and silver oaks planted in 2′ cube pits at 10′ apart in the lines. The plants are doing well. Cutting the lantana in this manner also helps the growth of jungle tree plants that are trying to make their way through. The cost of the work was not large, only Rs. 10 per acre.

(7) *Cutting of Creepers and Forest weedings.*

43. More attention is gradually being paid to this work. The following are the area which have been treated.—

Nalkerri	
Ammale block	120 acres.
Dodahallah	500 „
Hatgat	
Moorkal	100 „
Mawkal	
Taricatte	100 „
	820

(8) *Experiments and Exotics.*

44. *Silos.* A silo was made at Fraserpett and two at Hirikere; the one at Fraserpett was opened and contained good silage. It was offered to the people about for the mere taking away, but no one would take it, although it was fully demonstrated that cattle eat it. The Deputy Conservator's own cattle eat it with relish.

The silos at Hirrikere have not yet been opened, the Deputy Conservator not having had the opportunity to do so.

45. *Exotics.*—The *Ceara* continues to grow fairly well at Kutampolle and to sow itself.

The *Cocoa* and *Liberian* in the same locality only does pretty well where near water. Of the seed sent by the Inspector General of Forests only a few of the *Encalypti* succeeded. The Forester to whom they were entrusted asserted that they did not germinate although carefully watered. Unfortunately, they could not be looked after personally. Some seeds were obtained from Ootacamund as follows :—

Frenela Rhomboidea, Cupressus Tomlosa, Cupressus Macrocappa, and *Crystomeria Japanica,* of which the first named germinated well; of the 2nd and 3rd a few plants were obtained, and of the last none germinated.

46. List showing the rain-fall in the different parts of Forests in Coorg during the year 1886—87.

Months.	Gangwara.		Fraser-pett.		Maldare.		Dubare.		Titti-matty.		Karmad.		Nalkeri.		Kutum-palle.		Remarks.
	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	Inches.	Cents.	
April 1886...	2	...	1	19	3	..	...	40	1	5	1	...	1	20	1	95	
May " ...	4	...	7	88	9	85	9	70	8	92	10	50	13	45	15	65	
June " ...	9	55	3	97½	7	70	6	40	7	30	5	15	8	35	38	40	
July " ...	14	60	10	20	8	85	8	90	10	10	12	60	11	20	41	98	
August " ..	5	25	1	70	4	90	3	30	5	30	5	20	6	10	18	92	
September " ...	5	65	5	60	7	..	5	25	7	60	4	40	8	95	25	40	
October " ...	3	75	5	13	3	90	3	35	1	30	6	5	4	60	18	20	
November " ...	3	60	...	65	1	20	1	70	1	30	1	70	...	80	...	60	
December " ...	...	...	...	90	...	...	...	...	...	25	...	...	...	...	...	...	
January 1887 ...	...	...	...	...	...	65	...	...	1	5	1	5	...	20	...	...	
February " ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
March " ...	...	..	...	...	...	...	...	...	...	...	...	...	...	50	...	37	
Total...	48	40	37	16½	47	5	39	...	44	17	47	65	55	35	161	47	

47. The season was rather a dry one, on the whole. There was a heavy cyclone on the 24th and 25th May, but the monsoon was a moderate one. The showers in October and November were light and thenceforward till the end of March there was scarcely any rain. The east winds were not so prevalent or so strong in December and January as usual, but from the 12th to the 24th February it blew almost a constant hurricane from the east, quite an abnormal occurrence. After that there were alternate west and east winds as usual.

Communications and Buildings.

48. About 12 miles of the Hoonsoor-Nagrahole road was traced, jungle cleared and the roadway formed at a cost of Rs. 868—9—8. The work was undertaken rather late in the rainy season and the stuff filled into holes formed by the removal of roots did not get well consolidated; a good deal still remains to be done to complete the portion formed and about 12 miles more has to be traced and formed.

49. Two timber bridges were made over large *Nallahs* on the Tittimatti-Maldare road and one on the Maldare-Dubare road, at a cost of Rs. 141—4—4.

50. The Tittimatti-Ganagoor Kerre road (in South Arkeri) was traced a distance of 6 miles. This is an inspection road and is to be carried on through Hatgat to join the Nalkeri-Hunsoor road. Considerably more than half of it will likewise be useful for extracting timber. About ¾ mile of cart road was made from the Government road to the Kutampalle Bungalow at a cost of Rs. 47.

51. The expenditure on roads was as follows :—

Dubari-Maldare Bridge	49	0	4
Tittimatti Maldare	92	4	0
Maldare roads	57	5	4
Dubare "	116	13	1
Tittimatti-Mawkal...	25	14	8
Hatgat roads	51	14	0
Nalkeri "	280	6	0
Arkerri "	6	4	0
Hoonsoor-Nagrahole trace	868	9	8
Meen Colly road	34	10	0
Kutampalle "	46	13	9
Anecadu "	2	8	0
Yelusavirashime road	28	10	0
Total Rs.....	1,661	0	10

Buildings.

52. The Kutampalle Bungalow was completed and servants' out-houses, which had before been of a temporary nature, were begun. All the furniture has not as yet been made, the prices asked by contractors being higher than estimate, the furniture is being made by degrees under Mr. Tipping's superintendence. In this way, the cost of timber is saved.

A hut was built at Ganagoor Kere in South Arikerri for the accommodation of the Mootsaddi in charge of that Forest.

53. A tank was constructed at Moorkal, where the want of water in the dry weather is a serious impediment to the success of fire protection work and the extraction of timber.

The cost of this work was Rs. 208 including a small feeding channel. It may be necessary to increase the size of the bund and extend the feeding channel.

54. The expenditure on buildings was distributed as follows:—

Kutampalle	876	3	2
Aramane-bane	52	1	0
Maldare	72	2	8
Do well	21	0	0
Dubare Bungalow	10	4	6
Tittimatti Hut	5	0	0
Arakalagodu Depot	39	12	6
Anekadu Hut	20	0	0
Kargode Bungalow	20	8	0
Gangwara Hut	6	7	0
Arkerri Forster's Hut	81	6	2
Moorkal well	9	2	8
Nalkeri Bungalow	13	13	4
Hudgur Hut	3	0	0
Ramaswamy kanave Bungalow	8	15	10
Bakka Cattle Pound	0	12	0
Fraserpett Koti	7	0	0
Fraserpett Cutcherry	1	4	0
Moorkal Tank	208	7	4
Moorkal Bungalow	26	0	0
Mercara Plantation Hut	30	4	0
Total Rs.....	1,513	8	2

CHAPTER IV.

Yield and Working.

Departmental Fellings.

55. The number of trees felled was 2,294, yielding 114,978 cubic feet as against 1,889 yielding 67,556 cubic feet in 1885—86.

The quantity of timber removed to Depot was 3,704 logs=86,972 cubic feet counting stocks of former years, there remain 3,892 logs=91,344 cubic feet in the Forests.

56. A statement is appended showing the quantities of timber, the localities and areas in which felled; and the stock remaining in the forests.

Name of Forest and locality.	Description of wood.	Balance of Stock.		Area of felling.	Quantity felled during the year.			Total.		Quantity removed.		Balance remaining in Stock.		Remarks.
		No.	Cubic feet.		No. of Trees.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	
Nalkeri Forest.	Teak	498	9,693		456	1,096	30,121	1,594	39,814	747	20,348	847	19,466	
	Scantling	...	...		9	122	1,750	122	1,750	122	1,458	...	292	
	Honne	108	2,248		91	180	5,267	288	7,515	128	3,344	160	4,171	
	Other wood ...	67	1,990		164	393	9,078	460	11,068	140	3,441	320	7,627	
		673	13,931		720	1,791	46,216	2,464	60,147	1,137	28,591	1,327	31,556	
Mattigodu Arkery.	Teak	66	1,206		20	34	634	100	1,840	46	892	54	948	
	Honne	127	1,083		35	53	1,107	180	2,190	70	1,334	110	856	
	Other wood ...	73	1,365		38	74	1,588	147	2,953	71	1,271	76	1,682	
	Do poles ...	...	...		...	353	...	353	...	353	...	...	...	
		266	3,654		93	514	3,329	780	6,983	540	3,497	240	3,486	
Tittimatti Mawkal.	Teak	151	2,915		6	6	101	157	3,016	66	1,729	91	1,287	
	Honne	131	2,205		50	68	1,672	199	3,877	143	3,209	56	668	
	Other wood ...	231	3,823		119	174	4,306	405	8,129	75	1,770	330	6,359	
	Do poles ...	38	...		...	329	...	367	...	367	...	...	...	
		551	8,943		175	577	6,079	1,128	15,022	651	6,708	477	8,314	
Halgat.	Teak	41	1,730		268	651	21,692	692	23,422	469	14,542	223	8,880	
	Honne	9	339		83	122	2,834	131	3,173	99	2,342	32	831	
	Other wood ...	58	1,600		114	122	2,771	180	4,371	158	3,888	22	483	
	Do poles ...	2	...		...	9	...	11	...	2	...	9	...	
		110	3,669		465	904	27,297	1,014	30,966	728	20,772	286	10,194	
Maldare.	Teak	7	154		9	22	361	29	515	1	8	28	507	
	Honne	73	1,738		108	177	3,468	250	5,206	147	2,698	103	2,508	
	Other wood ...	78	1,732		31	43	943	121	2,675	48	1,096	73	1,579	
	Do poles ...	1	...		...	211	...	212	...	36	...	176	...	
		159	3,624		148	453	4,772	612	8,396	232	3,802	380	4,594	

Name of Forest and locality.	Description of wood.	Balance of Stock.		Area of felling.	Quantity felled during the year.			Total.		Quantity removed.		Balance remaining in Stock.		Remarks.
		No.	Cubic feet.		No. of Trees.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	No.	Cubic feet.	
Kesavenkere.	Teak	8	107		...	...	...	8	107	...	...	8	107	
	Honne	34	756		...	...	...	34	756	...	...	34	756	
	Other wood poles ...	8	...		...	...	...	8	...	...	...	8	...	
		50	863		...	...	...	50	863	...	...	50	863	
Dubare.	Teak	85	1,224		12	18	260	103	1,484	25	563	78	921	
	Honne	162	3,353		57	78	1,644	240	4,997	66	1,388	174	3,609	
	Other wood ...	88	2,049		21	26	426	114	2,475	37	553	77	1,922	
	Teak poles ...	19	...		...	...	...	19	...	...	...	19	...	
		354	6,626		90	122	2,330	476	8,956	128	2,504	348	6,452	
Anekadu.	Teak	35	667		5	7	624	42	1,291	27	686	15	605	
	Honne	35	380		43	58	2,034	93	2,414	78	1,744	15	670	
	Other wood ...	5	301		2	6	129	11	430	6	148	5	282	
		75	1,348		50	71	2,787	146	4,135	111	2,578	35	1,557	
Bactan Cote.	Teak	...	...		1	1	13	1	13	...	...	1	13	
	Honne	...	...		30	48	843	48	843	13	360	35	483	
	Other wood ...	...	...		41	64	1,145	64	1,145	18	397	46	748	
		...	...		72	113	2,001	113	2,001	31	757	82	1,244	
Attoor.	Teak	112	1,448		75	114	3,973	226	5,421	86	2,017	140	3,404	
	Honne	...	...		61	92	2,512	92	2,512	8	157	84	2,355	
	Other wood ...	31	767		40	55	1,456	86	2,223	42	882	44	1,341	
	Firewood	...	...		...	322	...	322	...	322	...	...	...	
		143	2,215		176	583	7,941	726	10,156	458	3,056	268	7,100	

Yedevanad.	Teak	68	2,019		38	38	915	106	2,934	89	2,201	17	733
	Honne	273	6,700		64	119	6,185	392	12,885	315	7,316	77	5,569
	Other wood ...	206	4,896		36	48	1,367	254	6,263	151	3,270	103	2,993
	Do poles ...	4	...		...	...	...	4	...	...	...	4	...
		551	13,615		138	205	8,467	756	22,082	555	12,787	201	9,295
Gadinad.	Teak	6	142		...	...	..	6	142	...	...	6	142
	Other wood ...	48	1,367		...	...	...	48	1,367	...	...	48	1367
		54	1,509		...	...	...	54	1,509	...	...	54	1,509
Jaincal.	Teak	226	2,115		13	22	263	248	2,378	...	...	248	2,378
	Honne	1	29		9	16	436	17	465	16	436	1	29
	Other wood ...	1	7		5	9	166	10	173	9	166	1	7
		228	2,151		27	47	865	275	3,016	25	602	250	2,414
Yelsavirshime.	Teak	...	...		45	94	658	94	658	94	658	...	...
	Honne	51	1,187		69	81	1,245	132	2,432	43	513	89	1,919
	Other wood ...	49	1,013		26	49	583	98	1,596	77	749	21	847
		100	2,200		140	224	2,486	324	4,686	214	1,920	110	2,766
Kutampalle.	Scantlings ...	...	...		...	69	409	69	409	69	409	...	...
		...	...		...	69	409	69	409	69	409	...	...
	Grand Total.....	3,314	64,348		2,294	5,673	114,979	8,987	179,327	4,879	87,983	4,108	91,344
						ABSTRACT.							
	Teak	1,303	23,420		948	2,103	59,615	3,406	83,035	1,650	43,644	1,756	39,391
	Honne	1,004	20,018		700	1,092	29,247	2,096	49,265	1,126	24,841	970	24,424
	Other wood ...	935	20,910		637	1,063	23,958	1,998	44,868	832	17,631	1,166	27,237
	Teak poles ...	19	...		...	...	...	19	...	...	...	19	...
	Other wood poles ...	53	...		...	902	...	955	...	758	...	197	...
	Firewood	...	...		...	322	...	322	...	322	...	...	...
	Scantling	...	..		9	191	2,159	191	2,159	191	1,867	...	292
	Total.....	3,314	64,348		2,294	5,673	114,979	8,987	179,327	4,879	87,983	4,108	91,344

57. All trees to be felled for timber were previously marked with a stamp either by the Divisional Officer or the Rangers. All timber felled is obtained from marked trees only, but there is still a difficulty in getting the felling men to fell *all* the marked trees; they are apt to leave some here and there, however carefully orders may be given to the contrary. A little stricter supervision on the part of the Foresters will remedy this.

58. The number of trees of other species as compared with teak was:—Teak 957=61,365 cubic feet, other species 1,337 trees=55,714 cubic feet.

There was a readier sale for other species especially honne than teak. It is therefore intended to increase the fellings of these species within the capabilities of the forests as far as they are at present known.

59. *Bamboos.*—The numbers of bamboos brought to depots were as follows:—

Anekadu-bakka	10,675
Mercara	300
Fraserpett	1,675
Total....	12,650

as against 14,049 last year.

It will be seen that the numbers brought to depot are decreasing, except at the Bakka Depot which is just outside the jungle.

The purchasers prefer taking them from the jungle.

60. *Fuel.*—Only 322 cart loads of fuel were supplied to the Distillery departmentally, as early in the year the Distillery gave notice that they had made arrangements with private persons for a cheaper supply.

61. *Sandalwood.*—Was collected departmentally. The quantity collected was 78½ tons at a cost of Rs. 2,314—6—6, or Rs. 29—7—8 per ton as compared with Rs. 25—6—3 per ton last year.

The number of trees which it took to produce this quantity was 4,320 or an average of 55 trees to the ton, as compared with average for the previous 3 years of 30 trees to the ton. The average for the last four years is 37½ trees to the ton.

The estimate production for the next 16 years has therefore been reduced to 60 tons a year.

(2). *Removal of produce by purchasers from Reserved Forests.*

62. The quantity of produce removed by purchasers from reserved forests was as follows:—

Name of Forest.	Description.	Quantity. No.	Quantity. C. ft.	Remarks.
Kootompole ...	Irpoo	89	...	
	Iynee	18	...	
	Agil	6	..	
	Irool, Bentag, Rolo, Yerre-Chette and Neeli	33	...	
	Scantlings	69	409	
Dubare ...	Miscellaneous poles	74	...	
Maldarre ...	Do	326	...	
Mawkal ..	Honne logs	6	...	
Arkeri ...	Do	4	...	
Hatgat ..	Miscellaneous poles	283	...	
Gangwara .	Do	27	...	
Yelusavirashime	Honne trees	1	...	
Paisaries ...	Miscellaneous poles	3	...	
	Other wood trees	26	...	
		965	409	

Name of Forest.	Description.	Quantity. No.	Quantity. C. ft.	Remarks.
Anekadu	Firewood cart loads	206	...	
Yadavanad	Do do	19	...	
	Firewood and charcoal	3,434	...	
		3,659	...	
	Bamboos	171,904	...	
		176,528	409	
	ABSTRACT.			
	Irpoo, Iynee, Agil and Honne ...	183	...	
	Scantlings	69	409	
	Miscellaneous	713	...	
		965	409	
	Firewood	3,659	...	
	Bamboos	171,904	...	
	Total.....	176,528	409	

63. The value of the timber thus removed was Rs. 1,442—9—0, and of the bamboos Rs. 2,027—12—9. Since the price of bamboos has been raised from Rs. 7—8—0 per thousand to Rs. 10 in South Coorg and Rs. 15 in North Coorg, the sales have been 103,996, as against 142,001 for the same period last year, but the receipts were Rs. 1,580 as against Rs. 1,110.

64. The total number of bamboos removed from forests was 171,904 as against 197,518 last year.

The inducement held out to take large quantities by allowing a deduction on the price has not as yet brought any large purchasers; they continue to be taken in small numbers of 1,000 and less.

65. The following free grant was made from the reserved forests:—

4 Honne trees	24	0	0
3 Matti trees	12	0	0
3 Nandi trees	13	8	0
5,000 Bamboos	50	0	0
Total Rs.....	99	8	0

66. Summary of yield of reserved forests.

I a Timber—							
714 logs=17,589 Cubic feet of teak	13,969	15	5				
14 logs=644 Cubic feet of sawn teak	564	15	0				
41 sleepers=63 Cubic feet of teak	20	10	9				
259 planks=2,226 Cubic feet of teak	2,178	7	9				
794 logs=17,518 Cubic feet of honne	11,391	3	9				
544 logs=11,179 Cubic feet of other wood ...	4,996	9	6				
842 miscellaneous poles	495	8	0				
69 scantlings=409 Cubic feet, other wood ...	409	0	0				
				34,026	6	2
I b. Firewood 322 cart loads of firewood	261	10	0			
				261	10	0
I c. Bamboos 10,668 bamboos	305	0	0			
				305	0	0
II a. Timber 183 Honne, Irpoo, Agilee &c. trees	1,062	12	0			
713 Miscellaneous poles...	379	13	0			
				1,442	9	0
II b. Firewood 3,659 cart loads of firewood	1,106	6	5			
				1,106	6	5
II c. Bamboos 171,904 bamboos	2,027	12	9			
				2,027	12	9
II d. Grazing	368	4	0			
2,500 Amrut Mahal cattle at 8 annas a head ...	1,250	0	0			
				1,618	4	0
II e. Other minor produce—						
Tamarind	105	0	0			
Papli Chekke	10	0	0			
Segekayee	376	0	0			
Honey wax and saffron	390	0	0			
Alalekayee	436	0	0			
Samber skin	1	0	0			
Antawolada kayee	6	0	0			
Reeds	1	0	0			
Burning lime	13	0	0			
				1,338	0	0
Total.....				42,126	0	4

giving an average of 4—4 per acre as against 4—5 per acre for last year.

(3). *Unreserved Forests.*

67. The number of trees removed by purchasers from unreserved forests on payment was as follows :—

22	Honne	133	0	0
6	Nandi	27	0	0
4	Sampige	16	8	0
17	Matti	54	0	0
10	Beeti	50	0	0
1	Ebony	6	0	0
1	Cart load of posts	4	0	0
1,500	Bamboos	19	0	0
9	Head loads of (Vote) reeds	0	4	6
	Total Rs.....	309	12	6

68. Some small additions aggregating about 100 acres were made to the Fuel Reserves near Mercara, they now contain some 300 acres; of this area 105 is planted and it is all protected from fire.

69. The timber sold on lands given for coffee cultivation was as follows :—

		Rs.	A.	P.
1	Teak	3	0	0
220	Honne	1,076	10	0
167	Beeti	434	15	6
232	Nandi	524	7	10
15	Hebbalasoo	34	4	0
15	Jack	7	12	0
834	Matti	1,574	14	7
4	Sampige	15	0	0
7	Nowladi	15	8	0
12	Nerloo	16	5	10
7	Noga	8	4	10
6	Bilwara	7	0	0
2	Arsintega	0	12	0
6	Junglewood	1	6	0
197	Honne, Matti, Nandi &c.	108	2	0
	Total Rs.....	3,828	6	7

70. Free grants of forest produce from unreserved forests were given as follows, principally from village forests.

		Rs.	A.	P.
9	Honne trees	54	0	0
1	Hebbalasoo	10	0	0
2	Nandi	9	0	0
8	Matti	32	0	0
192	Other wood poles	88	0	0
2,900	Bamboos	43	8	0
	Total Rs.....	236	8	0

Cardamom Males.

71. The new leases were given for the cardamom *males* during the year. The total yearly rent for the first seven years will be Rs. *23,891 per annum as against Rs. 21,260 during the last term of leases. It was unfortunate that the price of cardamom went down to a very low ebb at the time crops were picked, but they have since risen considerably and now stand at about Rs. 40 per maund.

*The correct figures are Rs. 23,673—2—2. T. G. C.

Applications have been received for some jungles hitherto not cultivated with cardamoms, which it is proposed now to lease.

72. Compensation for damage done to sandalwood was recovered to the amount of Rs. 177—10—0.

CHAPTER V.

Financial Results.

73. The revenue and expenditure for the year under the three main budget heads were as follows:—

	Timber and other produce removed from the Forests by Government agency.		Other Revenue.		Formation, protection and improvement	Total.	
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.
	61,822	37,787	37,469	5,587	30,714	99.291	74,088

giving a surplus of Rs. 25,203.

74. The revenue was less than the estimate by Rs. 11,709.

The principal decreases were under:—

I (a.) Timber which was owing to the teak stock being kept back temporarily, because at the auction in February prices offered for teak were low, and it was thought that the market would rise.

Under I. b. Firewood, a decrease of Rs. 949, the distillery contractor having made his own arrangements with Mysore ryots holding land in the neighbourhood to supply the wood. The net loss on this account is Rs. 253, but on the other hand there was an increase of Rs. 318 under II. b.

Under I. c. Bamboos, a decrease of Rs. 637 or net decrease of Rs. 273, but as a set-off there is an increase of Rs. 122 under II. c: purchasers are every year resorting more and more to the jungles for their bamboos.

Under I. d. Sandalwood.—Rs. 11,065—Owing to short collection, it being found that the supply of mature wood is running short. It has for this reason been determined to reduce future collections to 60 tons a year.

Under II. e. A decrease of Rs. 627—because the sales of the right to collect minor forest produce fetched less than those of 1885—86 by Rs. 743, owing to its being a bad year for honey and wax, also tamarinds.

Under V. c. Other sources (principally value of timber growing on lands given for coffee Rs. 686). A sum of Rs. 2,028 expected was not recovered till after the close of the year.

On the other hand, besides the small increases under II. b. and II. c, there was an increase of Rs. 550 under II. a., owing to increased sales of timber in the forest at Kutoompolle. But the principal increase was under cardamoms, Rs. 7,677, which was owing to better rents obtained under the new long term leases and the recovery of arrears to the amount of Rs. 3,935.

There were also increases of Rs. 29 under I. (e), and 183 under II. (d).

Under expenditure there was a saving of Rs. 34. But the original estimate had to be considerably altered to transfer funds to Head A I. a—Collection of timber—under which head Rs. 6,720 was spent more than estimate, because so much more timber was brought to the Hoonsoor depot than was expected.

CHAPTER VI.

General Remarks.

75. The increase to Forest and Office Establishment has not been sanctioned, but temporary establishment is sanctioned to make up for the deficiency.

76. Mr. Moottannah did useful work before he was transferred to the Central Provinces in completing the valuation surveys in Nalkeri and Hatgat forests and in working out some of the calculations needed for making a Working Plan for these forests.

77. *The Forest Establishment.*—Worked fairly well with some exceptions, and with the exception of fire protection the year was one of progress.

78. *The Office Establishment.*—Worked fairly well, but there is still room for improvement in keeping work better up to date.

Mercara,
Dated 23rd June 1887.

F. B. DICKINSON,
Deputy Conservator of Forests, Coorg.

FORM No. 49.

FOREST DEPARTMENT, COORG.

Area of Reserved, Protected, and District Forests, 1886—87.

Division.	Range.	Civil District or Territory.	Name of Forest.	Area on 1st April 1886. Acres.	Area on 1st April 1886. Equivalent in square miles.	Added during the year. Acres.	Excluded or transferred from other Heads. Acres.	Area on 31st March 1887. Acres.	Area on 31st March 1887. Equivalent in square miles.	No. and Date of Notification of addition or transfer.	Remarks.
Coorg.	North Coorg.	Coorg.	Kattepura ...	585	1	...	...	585	1		
			Sandalkoti ...	276	...	...	...	276	...		
			Alloor ...	395	1	...	...	395	1		
			Ganagoor ...	6,231	10	...	...	6,231	10		
			Yedevanad ...	6,902	11	1,000	...	7,902	12	39 dated 17-6-86.	Chikkahudugoor added during the year.
			Anekadu ...	11,957	19	...	...	11,957	19		
			Bactankote ...	...	...	800	...	800	1	4 dated 3-2-87.	
			Dubare ...	11,363	18	...	...	11,363	18		
			Devammachi ..	9,384	15	...	...	9,384	15		
			Mawkal ...	8,188	13	93	...	8,281	13	Revised according to Survey Map.	
			Arkerinad ...	18,476	29	...	179	18,297	29	Do	
	South Coorg.		Hatgatnad ...	27,520	43	...	...	27,520	43		
			Nalkeri ...	26,142	40	...	...	26,142	40		
			Urti and Kerti ...	19,200	30	...	...	19,200	30		
			Chembu and Quinad	6,400	10	...	...	6,400	10		
			Total.....	1,53,019	240	1,593	179	1,54,733	242		

FORM No. 50.

Register of Breaches of Forest Rules during 1886—87.

Prosecutions in the Courts of Law.

Forest Division and Civil District.	Cases pending from 1885—86.	New Cases of the year. Injury to Forest by fire.	New Cases of the year. Unauthorized felling or misappropriation of wood and minor Forest produce.	New Cases of the year. Grazing without permission or in tracts in which grazing is prohibited.	New Cases of the year. Other offences.	New Cases of the year. Total new cases of the year.	Total cases.	Disposed of during the year. Convictions. Cases.	Disposed of during the year. Convictions. Persons.	Disposed of during the year. Acquittals. Cases.	Disposed of during the year. Acquittals. Persons.	Disposed of during the year. Total. Cases.	Disposed of during the year. Total. Persons.	Cases pending at close of the year.	Remarks.
North Coorg ...	...	...	6	...	2	8	8	7	13	1	2	8	15	...	
South Coorg ...	...	1	...	...	...	1	1	...	...	1	3	1	3	...	
Mercara ...	...	...	...	...	1	1	1	...	...	1	1	1	1	...	
Total.....	..	1	6	...	3	10	10	7	13	3	6	10	19	...	

FORM No. 51.

Area of Forest Tracts protected from Fire during the dry season of 1886, *to accompany Report for* 1886—87.

Division.	Forest Tracts.	Year in which protection was commenced.	Area actually protected up to 1st June 1886.	During the dry season of 1886. Area attempted to be protected.	During the dry season of 1886. Failures.	During the dry season of 1886. Actually protected.	Cost during the season.	Remarks.
			Acres.	Acres.	Acres.	Acres.	Rupees.	
Coorg.	Dubare	1877	11,340	11,363	221	11,142	251	
	Anekadu	1876	12,154	11,957	303	11,654	195	
	Bactankote	1886	...	800	...	800	21	
	Yedavanad	1878	6,302	7,902	2	7,900	331	
	Ganagoor	1878	6,219	6,231	10	6,221	239	
	Sandalkoti	1877	276	276	2	274	84	
	Fraserpet Sandal Plantation...	1881	28	28	1	27	25	
	Devamarchi	1878	9,326	9,384	1,880	7,504	285	
	Nalkori	1878	23,860	26,142	2,867	23,275	539	
	Mawkal	1878	8,188	8,281	95	8,186	247	
	Arkeri	1878	15,618	18,297	4,509	13,788	188	
	Hatgat	1878	20,998	27,520	14,700	12,730	290	
	Tittimatti Sandal Plantation..	1883	24	24	24	...	19	
	Kutumpole Teak Plantation...	1881	261	343	150	193	53	
	Mercara Fuel Reserve ...	1883	200	300	...	300	302	
	Total.....		1,14,794	1,28,848	24,854	1,03,994	3,069	

Form No. 52.

FOREST DEPARTMENT, COORG.

Area of Plantations, 1886—87.

Division.	Name of Plantation.	Area in Acres. On 1st April 1886.	Added during the year.	Excluded during the year.	Area on 31st March 1887.	Receipts. Of the year. Rs.	Charges. Rs.	Remarks.
	Regular Plantations.							
Coorg.	Karmad Teak ...	189	...	...	189	...	456	
	Kutompole do ...	261	82	...	343	467	4,622	Receipts from sale of timber from clearings.
	Karepura do ...	14	...	...	14	...	...	
	Tittimatti do ...	24	...	...	24	...	81	
	Anekadu do ...	40	5	...	55	..	22	
	Do Teak in the open ...	10					311	
	Ammale, Nalkeri do ...	17	...	...	17	...	175	
	Hanacodu Dubare do ...	10	...	...	10	...	57	
	Maldare do ...	10	...	...	10	...	50	
	Hurlikal, Attoor do ...	13	2	...	15	10	87	Grass sold.
	Irumani, Hatgat do ..	8	...	...	8	...	16	
	Chillikore, Dubare do ...	6	2	...	8	...	105	
	Mercara Fuel ...	65	20	...	105	181	387	Receipts from plants sold and firewood.
	Gangawara Sandal ...	90	7	..	97	...	734	
	Fraserpet Holageri ...	5	...	...	5	6	4	Receipts from sale of grass.
	Do Gandadagundi ...	23	...	...	23	20	110	Do do
	Herikore ...	50	10	...	60	.	501	
	Nagarahole, Nalkeri ...	12	...	...	12		93	
	Balumani, Mawkal ...	22	...	...	22	...	74	
	Dubare, Bungalow ...	8	...	...	8	...	194	
	Kargodu, Malambi ...	12	...	...	12	..	91	
	Banawara, Nidta ...	10	...	...	10	...	27	
	Maldare, South Dubare ...	14	1	...	15	...	183	
	Hurlikal, Anekadu ...	16	...	..	16	...	17	
	Attoor Bakka do ...	23	...	...	23	6	144	Receipts from sale of grass.
	Karmad, Hatgat ...	15	...	...	15	...	86	
	Yarecolly, Anekadu ...	4	...	...	4	...	5	
	Bamboo kad, Tittimatti ...	11	7	...	18	...	356	
	Total Rs.....	1,002	136	...	1,138	690	8,988	
	Cultural Operations.							
	Nalkeri...	10	...	...	10	...	...	
	Total	10	...	...	10	...	...	
	Grand Total	1,012	136	...	1,148	...	8,988	
				Abstract.				
	12 Teak plantations... ...	602	91	...	693	477	5,982	
	15 Sandal do	315	25	...	340	32	2,619	
	1 Fuel do	65	20	...	105	181	387	
	Total.....	1,002	136	...	1,138	690	8,988	

Form No. 53.

FOREST DEPARTMENT, COORG.

Trees felled or girdled by Government Agency during the year 1886—87.

(*Selection fellings.*)

Division.	Trees felled or girdled. Description.	Number.	Remarks.
Bactan Cote	Teak	1	
	Honne	30	
	Other wood	41	
		72	
Anekadu	Teak	5	
	Honne	43	
	Other wood	2	
		50	
Attoor	Teak	75	
	Honne	61	
	Other wood	40	
		176	
Yedevanad	Teak	38	
	Honne	64	
	Other wood	36	
		138	
Jaincal and Yelsavirakime	Teak	58	
	Honne	69	
	Other wood	40	
		167	
Dubare Silpi	Teak	12	
	Honne	57	
	Other wood	21	
		90	
Makkaro	Teak	9	
	Honne	108	
	Other wood	31	
		148	
Tittimatti Mawkal	Teak	6	
	Honne	50	
	Other wood	119	
		175	
Mattigodu Arkery	Teak	20	
	Honne	35	
	Other wood	38	
		93	
Haigat	Teak	268	
	Honne	83	
	Other wood	114	
		465	
Nalkery	Teak	465	
	Honne	91	
	Other wood	164	
		720	
	Grand Total Rs.....	2,294	
	Abstract.		
	Teak	957	
	Honne	691	
	Other wood	646	
	Total.....	2,294	

Form No. 54.

FOREST DEPARTMENT, COORG.

Out-turn of Timber and Firewood during the year 1886—87.

Division.	Description of Materials.	Out-turn in Cubic feet.								Remarks.
		Selection fellings.	Clearings.	Thinnings.	Total.	Removed by—				
						Government Agency.	Purchasers.	Free grants.	Right holders.	
		Reserved Forest.								
Nalkeri Forest ... Dodhalla ...	Teak	30,121	...	...	30,121	20,348	...	...	...	
	Scantling	1,750	...	...	1,750	1,458	...	...	...	
	Honne	5,267	...	...	5,267	3,344	...	...	...	
	Other wood	9,078	...	...	9,078	3,441	...	...	...	
		46,216	...	...	46,216	28,591	...	...	...	
Mattigodu ... ... Arkeri	Teak	634	...	...	634	892	...	...	...	
	Honne	1,107	Trees 4	...	1,107	1,334	Trees 4	...	...	
	Other wood	1,588	...	...	1,588	1,271	...	...	...	
	Miscellaneous Poles ...	No. 353	...	...	No. 353	353	...	...	...	
		3,682	Trees 4	...	3,682	3,850	Trees 4	...	...	
Tittimatti ... ... Mawkal	Teak	101	...	...	101	1,729	...	...	...	
	Honne	1,672	Trees 6	...	1,672	3,209	Trees 6	...	...	
	Other wood	4,306	...	...	4,306	1,770	...	...	...	
	Miscellaneous Poles ...	329	...	...	329	367	...	...	...	
		6,408	Trees 6	...	6,408	7,075	Trees 6	...	...	
Hatgal	Teak	21,692	...	...	21,692	14,542	...	...	...	
	Honne	2,834	...	...	2,834	2,342	...	...	...	
	Other wood	2,771	...	...	2,771	3,889	...	...	...	
	Miscellaneous Poles ...	9	No. 285	...	9	...	No 285	...	..	
		27,306	285	...	27,306	20,772	285	...	...	
Maldare ...	Teak	361	...	...	361	8	...	...	...	
	Honne	3,468	...	...	3,468	2,698	...	...	...	
	Other wood	943	...	...	943	1,096	...	...	...	
	Miscellaneous Poles ...	211	326	...	211	...	326	...	...	
		4,983	326	...	4,983	3,802	326	...	...	
Dubare	Teak	260	...	...	260	568	...	...	...	
	Honne	1,644	Trees 4	...	1,644	388	...	Trees 4	...	
	Other wood	426	Trees 6	...	426	553	...	Trees 6	...	
	Miscellaneous Poles ...	...	No. 74	...	...	...	No. 74	...	...	
		2,330	84	...	2,330	2,504	74	10	...	
Anekadu	Teak	624	...	...	624	686	...	...	..	
	Honne	2,034	...	...	2,034	1,744	...	...	...	
	Other wood	129	...	...	129	148	...	...	...	
		2,787	...	...	2,787	2,578	...	...	...	
Bactankote	Teak	13	...	...	13	...	...	...	...	
	Honne	843	...	...	843	360	...	...	...	
	Other wood	1,145	...	...	1,145	397	...	...	...	
		2,001	...	...	2,001	757	...	...	...	
Attoor	Teak	3,973	...	...	3,973	2,017	...	...	...	
	Honne	2,512	...	...	2,512	157	...	...	...	
	Other wood	1,456	...	...	1,456	882	...	...	...	
	Firewood	322	Cart loads	...	322	322	Cart loads	...	...	
		8,263	...	...	8,263	3,378	...	...	...	
Yelevanad	Teak	915	...	...	915	2,201	...	...	...	
	Honne	6,185	...	...	6,185	7,316	...	...	...	
	Other wood	1,367	...	...	1,367	3,270	...	...	...	
	Total.....	8,467	...	...	8,467	12,787	...	...	...	

Form No. 54.—*Continued.*

FOREST DEPARTMENT, COORG.

Division.	Description of Materials.	Out-turn in Cubic feet.								Remarks.
		Selection fellings.	Clearings.	Thinnings	Total.	Removed by—				
						Government Agency.	Purchasers.	Free grants.	Right holders.	
Jaincal	Teak	263	...	...	263	...	...	...	...	
	Hoone	436	...	...	436	436	...	...	...	
	Other wood	166	...	...	166	166	...	...	...	
		865	...	...	865	602	...	...	...	
Yelsavirshime ...	Teak	658	...	...	658	658	...	...	...	
	Hoone	1,245	Trees 1	...	1,245	513	Trees 1	...	...	
	Other wood	583	...	...	583	749	...	...	...	
	Miscellaneous Poles ...	...	No. 12	...	..	...	No. 12	...	...	
		2,486	13	...	2,486	1,920	13	...	...	
Kootompole	Scantlings	...	C.ft. 409	...	...	...	C.ft. 409	...	...	
	Irupoo, &c., trees ...	...	Trees 146	...	...	...	Trees 146	...	...	
		...	555	...	...	...	555	...	...	
Bamboos	Bamboos	188,388	...	...	188,388	12,650	171,679	5,000	...	
		188,388	...	...	188,388	12,650	171,679	5,000	...	
	Grand Total.....	304,182	1,278	...	304,182	101,266	172,942	5,010	...	
		Protected Forest.								
Urudwes and Paisaries ...	Other wood trees ...	80	...	...	80	...	60	20	...	
	Poles	222	...	...	222	...	30	192	...	
	Firewood	3,659	Cart loads	...	3,659	Cart loads	3,659	Cart loads	...	
	Bamboos	4,400	...	...	4,400	...	1,500	2,900	...	
	Wate (Reeds.)	9	Hd. loads.	...	9	Hd. loads.	9	Hd. loads.	...	
	Total...	8,370	...	...	8,370	...	5,258	3,112	...	
		Abstract of Reserved Forest.								
	Teak	59,615	...	...	59,615	43,644	...	...	...	
	Scantling	1,750	C.ft. 409	...	1,750	1,458	C.ft. 409	...	...	
	Hoone	29,247	15	...	29,247	24,841	11	Trees 4	...	
	Other wood	23,958	152	...	23,958	17,631	146	Trees 6	...	
	Do Poles ...	902	697	...	902	720	697	...	...	
	Bamboos	188,388	...	...	188,388	12,650	171,679	5,000	...	
	Firewood	322	...	...	322	322	...	...	...	
	Total.....	304,182	1,278	...	304,182	101,266	172,942	5,010	...	
		Abstract of Protected Forest.								
	Other wood trees ...	80	...	...	80	...	60	20	...	
	Poles	222	...	...	222	..	30	192	...	
	Firewood	3,659	...	...	3,659	...	3,659	...	...	
	Bamboos	4,400	...	...	4,400	...	1,500	2,900	...	
	Wate (Reeds)	9	Hd. loads.	...	9	Hd. loads.	9	Hd. loads.	...	
	Total	8,370	...	...	8,370	...	5,258	3,112	...	

Form No. 55.

Out-turn of Minor Forest Produce during 1886—87.

Division.	Description of Produce.	Produce removed or utilized.										Remarks.
		By Government Agency.		By purchasers.		By free grants.		By right holders.		Total.		
		Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
Coorg.	Tamarind	...	...	...	105	...	...	...	...	...	105	
	Puplichakke	...	...	...	10	...	...	...	...	...	10	
	Segekayee	...	...	...	376	...	...	...	...	...	376	
	Honey wax and Saffron ...	...	...	...	390	...	...	...	...	...	390	
	Alakekayee	...	...	...	436	...	...	...	...	...	436	
	Sambar skin	...	...	...	1	...	...	...	...	...	1	
	Autwalada kayee ...	...	...	...	6	...	...	...	...	...	6	
	Reeds	...	...	...	1	...	...	...	...	...	1	
	Burning lime	...	...	...	13	...	...	...	...	...	13	
	Total.....	...	...	...	1,338	...	...	...	...	...	1,338	

Form No. 56.

FOREST DEPARTMENT, COORG.

Account of Timber and other produce cut or collected by Government Agency and brought to Sale Depots or sold locally during the year 1886—87.

Particulars.	No. or Quantity.	Cubic feet.	Total of each Head. No. or Quantity.	Total of each Head. Cubic feet.
Balance at the commencement of the year.				
Teak logs	238	5,372		
" Sawn	14	644		
" Sleepers	41	63		
" Planks	257	2,906		
Honne	252	4,952		
Other wood	224	3,781		
			1,026	17,024
Teak poles	6	...		
Other wood poles	303	...		
			309	...
Bamboos	3,749	...		
			3,749	...
			5,084	17,024
Received from the Forest at sale depots.				
Teak logs	1,650	43,644		
" Sawn	9	392		
" Sleepers	...	...		
" Planks	113	1,066		
Honne	1,109	24,405		
Other wood	823	17,465		
			3,704	86,972
Other wood poles	718	...		
			718	...
Firewood	322	Cart loads.		
			322	...
Bamboos	12,650	...		
			12,650	...
			17,394	86,972
Grand Total.....			22,478	103,996
Balance at the commencement of the year.				
Sandal wood	...	...		
Good wood	8 Tons.	...		
Inferior wood	...	...		
			8 Tons.	...
Received during the year.				
Good wood	34 Tons.	...		
Inferior wood	44 Tons.	...		
			78 Tons.	...
Excess found.				
Good wood	...	...		
Inferior wood	...	...		
			...	...
Grand Total.....	...	...	86 Tons.	...

Particulars.	No. or Quantity	Cubic feet.	Total of each Head. No. or Quantity.	Total of each Head. Cubic feet.
Removed by Purchasers.				
Teak logs	714	17,589		
" Sawn	14	644		
" Sleepers	41	63		
" Planks	259	2,226		
Honne	794	17,518		
Other wood	544	11,179		
			2,366	49,219
Other wood poles	842	...		
			842	...
Firewood cart loads... ...	322	...		
			322	...
Bamboos	12,668	...		
			12,668	...
			16,198	49,219
Loss or written off as useless. ...	...	...	...	...
Balance at close of the year.				
Teak logs	1,174	31,433		
" Sawn	9	392		
" Sleepers	...	...		
" Planks	111	1,046		
Honne	567	11,839		
Other wood	503	10,067		
			2,364	54,777
Teak poles	6	...		
Other wood poles	179	...		
			185	...
Bamboos	3,731	...		
			3,731	...
			6,280	54,777
Grand Total.....			22,478	103,996
Removed by Purchasers.				
Good wood	40 Tons.	...		
Inferior wood	43 Tons.	...		
			83 Tons.	...
Dringe made good.				
Good wood	...	...		
Inferior wood	...	...		
			...	...
Balance at close of the year.				
Good wood	2 Tons.	...		
Inferior wood	1 Ton.	...		
			3 Tons.	...
Grand Total.....			86 Tons.	...

FORM No. 57.

FOREST DEPARTMENT, COORG.

Abstract showing the Value of Timber and other Produce at Sale Depots for the year 1886—87.

Description of timber, and other produce.	On hand at commencement of the year.			On hand at close of the year.			Difference in value.		Remarks.
	No. of Logs.	C. ft.	Value.	No. of Logs.	C. ft.	Value.	In favour of the year.	Against the year.	
Teak logs	238	5,378	3,094	1,174	31,433	23,575			
„ sawn logs ...	14	644	182	9	392	294			
„ Sleepers	41	63	20	...	...	...			
„ Planks	257	2,206	1,028	111	1,046	784			
Honne	252	4,952	2,646	567	11,339	5,953			
Other wood	224	3,781	1,792	503	10,067	4,024			
Teak poles	6	...	6	6	...	6			
Other wood poles ...	303	...	303	179	...	179			
Bamboos	3,749	...	30	3,731	...	30			
Total.....	5,084	17,024	9,101	6,280	54,777	34,845			
Sandal wood.									
Good wood	8 Tons.	...	2,784	3	Tons.	696			
Inferior wood	...	...	...	1	...	32			
Total.....	8	...	2,784	3	...	728			
Grand Total ...	5,092	17,024	11,885	6,283	...	35,573	23,688	...	

FORM No. 58.

Summary of Revenue of the Coorg Forest Division, 1886—87.

Budget Heads Receipts.	Total.		
I.—Timber and other produce removed from the Forests by Government Agency—			
a. Timber	35,344	8	6
b. Firewood and charcoal	250	10	0
c. Bamboos	262	6	0
d. Sandalwood	25,934	13	11
e. Grass and other minor produce	29	6	0
II.—Timber and other produce removed from the Forests by consumers or purchasers—			
a. Timber	1,750	3	0
b. Firewood and charcoal	1,118	6	5
c. Bamboos	2,122	9	3
d. Grazing and fodder grass	282	10	0
e. Other minor produce...	1,372	5	5
e. Cardamoms	28,377	9	3
III.—Confiscated drift and waif wood	...	...	...
IV.—Revenue from Forests not managed by Government—			
a. Duty on foreign timber and other forest produce	...	...	...
b. Revenue from shared and private forests	...	...	...
V.—Miscellaneous—			
a. Fines and forfeitures	0	8	0
b. Refunds	30	12	7
c. Other sources	2,414	5	9
Total Receipts.....	99,291	2	1

J. TAYLOR,

Assistant Comptroller General (Forests).

FORM No. 58.

FOREST DEPARTMENT, COORG.

Summary of Expenditure, 1886—87.

Budget Heads.	Total.		
A.—Conservancy and Works.			
I.—Timber and other produce removed from the Forests by Government Agency :—			
a. Timber	23,843	14	1
b. Firewood and charcoal	226	15	0
c. Bamboos	219	7	0
d. Sandalwood	2,314	6	6
e. Grass and other minor produce	...	...	...
II.—Timber and other produce removed from the forests by consumers or purchasers	838	8	0
III.—Confiscated drift and waifwood	...	...	...
IV.—Revenue from forests not managed by Government—			
a. Duty on foreign timber and other forest produce	...	...	...
b. Revenue from shared and private forests	...	...	...
V.—Rent of leased forests and payments to share-holders in forests managed by Government	...	...	...
VI.—Live Stock, Stores, Tools and Plant :—			
a. Purchase of cattle	...	...	...
b. Feed and keep of cattle	150	0	8
c. Stores, tools and plant	736	13	8
VII.—Communications and Buildings :—			
a. Roads and bridges	1,661	0	10
b. Buildings	1,513	8	2
c. Other works	...	...	...
VIII.—Demarcation, improvement and extension of forests :—			
a. Demarcation	1,291	15	5
b. Compensation for land and rights	18	14	0
c. Surveys and working plans	1,883	10	5
d. Plantations	8,987	12	9
e. Protection from fire	2,989	1	3
f. Other works	58	12	8
IX.—Miscellaneous :—			
a. Refunds	17	12	0
b. Law charges	4	0	0
c. Other charges	130	5	2
Total A, Conservancy and Works.....	45,886	13	7
B.—Establishments.			
I. Salaries :—			
a. Conservators	...	...	...
b. Superior Officers	9,500	0	0
c. Subordinate Forest and Depot Establishments	10,764	13	5
d. Office Establishments	3,042	15	5
e. Deputation and Special Allowances	...	...	...
II.—Travelling Allowances :—			
a. Conservators	...	...	...
b. Superior Officers	2,985	9	11
c. Subordinate Forest and Depot Establishments	819	2	9
d. Office Establishments	216	13	0
III.—Contingencies :—			
a. Stationery	1	9	0
b. Carriage of Tents and Recoils	81	3	3
c. Rents, Rates and Taxes	...	...	...
d. Pay of Police Guards	...	...	...
e. Official Postage	377	4	0
f. Sundries	411	12	0
Total B, Establishment.....	28,201	8	9
Grand Total of Expenditure.....	74,088	1	4

FORM No. 59.

Account current for the year 1886—87.

Dr.							*Cr.*						
To Opening Balance	...	...	...	...	...	...	By 11 Forests						
„ VIII Assessed Taxes—							Expenditure as per Annual Summary				74,088	1	4
Income Tax deductions from salary bills	...	...	...	319	12	4	„ Forest Cash Remittances (Local).						
„ IX Forests—							Remittances to Treasuries ...	...	...	...	97,942	11	8
Revenue as per Annual Summary	...	...	...	99,291	2	1	„ Advances recoverable ...	...	...	...	28,071	6	11
„ Forest Cash Remittances (Local).							„ Suspense	...	...	...	40	4	0
Forest Cheques drawn ...	73,901	9	9										
Inter Divisional Transfers ...	488	0	0				„ Inter Departmental Transfers.						
				74,389	9	9							
„ Advances recoverable ...	...	...	...	27,464	5	9	Public Works Department,						
„ Suspense	...	...	...	34	0	0	Other Branches ...	1,328	14	0	...	...	...
„ Inter Departmental Transfers							Telegraph Department ...	140	0	0	1,468	14	0
Civil Departments ...	...	...	...	...	...	...							
Jails	...	...	...	112	10	0	„ Closing balance	...	...	...	...	...	...
Total.....	...	...	...	2,01,611	7	11	Total.....	...	...	...	2,01,611	7	11

J. TAYLOR,
Assistant Comptroller General, (Forests).

F. 1 No. 60.

FOREST DEPARTMENT, COORG.

Revenue received and Outstandings on account of Revenue during 1886—87.

Division.	Particulars.	Outstandings at commencement of year.			Value of Sales and other Revenue during year.			Total.			Amount realized during year.			Balance due to the Department at end of year.			Remarks.
Coorg	I. a.—Timber... ...	4,026	13	2	34,026	6	2	38,053	3	4	35,749	9	6	2,303	10	10	
	b. Firewood ...	...	...	...	261	10	0	261	10	0	261	10	0	...	...	...	
	c. Bamboos ...	102	4	0	305	0	0	407	4	0	361	8	0	45	12	0	
	d. Sandalwood ...	22	0	0	25,912	13	11	25,934	13	11	25,934	13	11	...	...	...	
	e. Grass and other minor produce ...	...	...	...	43	2	0	43	2	0	43	2	0	...	...	...	
	II. a.—Thuber	252	7	1	1,442	9	0	1,695	0	1	1,329	1	0	365	15	1	
	b. Firewood ...	58	8	0	1,106	6	5	1,164	9	5	1,102	12	5	61	13	0	
	c. Bamboos ...	23	14	6	2,027	12	3	2,051	10	9	2,011	11	3	39	15	6	
	d. Grazing and fodder grass... ...	75	8	0	368	4	0	443	12	0	306	10	0	137	2	0	
	e. Other minor produce...	1,257	12	0	1,368	1	5	2,625	13	5	1,351	13	5	1,274	0	0	
	Cardamoms ...	4,761	6	2	25,508	10	9	30,269	10	11	28,377	9	3	1,892	1	8	
	III. Confiscated drift and waif wood ...	5	7	0	...	...	...	5	7	0	...	...	...	5	7	0	
	V. a. Fines and forfeitures ...	...	...	...	0	8	0	0	8	0	0	8	0	...	...	...	
	b. Refunds... ...	...	...	...	4	2	0	4	2	0	4	2	0	...	...	...	
	c. Other sources ...	430	14	0	2,456	1	9	2,886	15	9	2,428	9	9	458	6	0	
	Total Rs....	11,016	2	11	94,831	7	8	1,05,847	10	7	99,283	7	6	8,564	3	1	

FORM No. 61.

Outstandings and Liabilities on account of Contractors and Disbursers for 1886—87.

Division.	Department Debtor.				Department Creditor.				Balance due.				Remarks.
	At commencement of year.	Recoveries in cash and value of supplies and work done during the year.	At close of year.		At commencement of year.	Payments made during year.	At close of year.		To Department, Outstandings.		By Department, Liabilities.		
Coorg Forest Division.	... ...	27,464 5 9	27,464 5 9		970 3 0	28,071 8 11	29,041 11 11		1,582 13 0		5 6 10		
Total.....	... ...	27,464 5 9	27,464 5 9		970 3 0	28,071 8 11	29,041 11 11		1,582 13 0		5 6 10		

J. TAYLOR,
Assistant Comptroller General, (Forests).

FORM No. 62.

Financial Results of the year 1886—87.

Division.	Timber and other produce removed from the Forests by Government Agency.		Other Revenue.		Formation, protection and improvement of Forests.	Total.		Remarks.
	Receipts.	Charges.	Receipts.	Charges.	Charges.	Receipts.	Charges.	
Coorg	61,822	37,787	37,469	5,587	30,714	99,291	74,088	

COORG DEPUTY CONSERVATOR'S OFFICE,
Mercara, 23rd June 1887.

F. B. DICKINSON,
Deputy Conservator of Forests, Coorg.

Residency Press, Bangalore.—10 8-87.—250.